

=> file reg

FILE 'REGISTRY' ENTERED AT 14:52:29 ON 31 JAN 2000  
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STRUCTURE FILE UPDATES: 30 JAN 2000 HIGHEST RN 253863-18-2  
DICTIONARY FILE UPDATES: 30 JAN 2000 HIGHEST RN 253863-18-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

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5.0 (Windows Only) SEE NEWS MESSAGE FOR DETAILS.

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 14:52:35 ON 31 JAN 2000  
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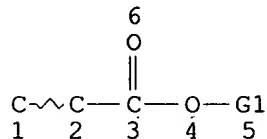
FILE COVERS 1967 - 31 Jan 2000 VOL ISS 6  
FILE LAST UPDATED: 30 Jan 2000 (20000130/ED)

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

This file supports REGlstrY for direct browsing and searching of  
all substance data from the REGISTRY file. Enter HELP FIRST for  
more information.

=> d que

L4 STR

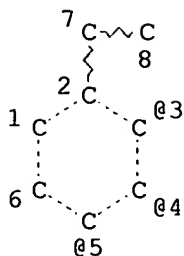


*structure 1*

VAR G1=AK/CY  
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DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE  
L5 STR



*structure 2*

OH @9

VPA 9-3/4/5 U  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

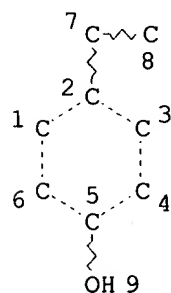
GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L7 SCR 2043

L9 5796 SEA FILE=REGISTRY SSS FUL L4 AND L5 AND L7

L10 STR



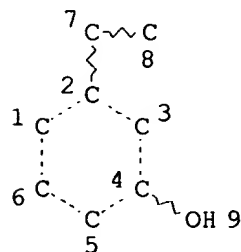
*Subset search for  
 polymers containing  
 p-hydroxy & Meta-hydroxy  
 phenyls.*

NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L11 STR



*16 polymers  
 structures*

## •NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

## STEREO ATTRIBUTES: NONE

L13 16 SEA FILE=REGISTRY SUB=L9 SSS FUL (L10 AND L11)

L14 17 SEA FILE=HCAPLUS ABB=ON L13

L15 2 SEA FILE=HCAPLUS ABB=ON L14 AND ?RESIST?

=&gt; d l15 1-2 all hitstr

*2 Ca ref's on resist?*

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2000 ACS

AN 1997:61077 HCAPLUS

DN 126:96929

TI Polymer of modified styrene-type unit and chemical amplification-type positive-working resist composition using same

IN Watanabe, Osamu; Takeda, Yoshifumi; Tsucha, Junji; Ishihara, Toshinobu

PA Shinetsu Chem Ind Co, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-039

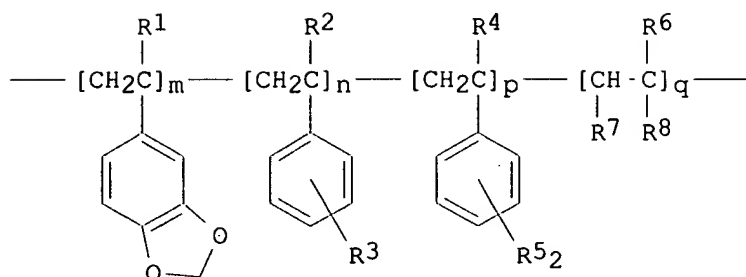
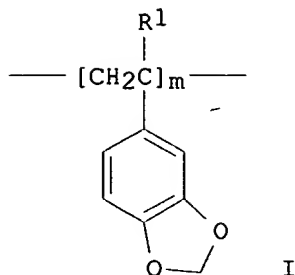
ICS G03F007-004

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08286375	A2	19961101	JP 1995-111188	19950412
GI					

*Duplicate to**5844057*



- AB The polymer has the general formula I or II with wt. av. mol. wt. (Mw) 3000-300,000 [R1, R2, R4, R6 = H or Me; R3, R5 = H, C1-6 alkyl, OX (X = H or acid-labile group); R7 = H and R8 = CO2Y (Y = H or acid-labile group) but R7 and R8 may link to form CO2CO; p = pos. integer, m, n, p, q = 0 or pos. integer satisfying the relation  $0 < m/(m + n + p + q) \leq 0.1$ ]. The title compn. comprises an org. solvent, the polymer as a base resin; a acid-generating agent, and an optional dissoln. inhibitor. A resist using 4-vinylbenzodioxole-3,4-dihydroxystyrene copolymer (0.82:0.18 mol ratio; Mw 14,500) showed high photosensitivity, resolu., exposure latitude, and processability.
- ST vinylbenzodioxole dihydroxystyrene copolymer resist; chem amplification pos working resist; single dispersion polymer resist; acid generating sulfonium salt resist; living polymn polymer resist
- IT **Photoresists**  
(polymer of modified styrene-type unit contg. acid-generating agent for chem. amplification pos. working resist)
- IT 13891-29-7 14159-45-6 141573-11-7 157089-26-4  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(acid-generating agent; polymer of modified styrene-type unit contg. acid-generating agent for chem. amplification pos. working resist)
- IT 117458-06-7 180921-76-0  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(dissoln. inhibitor; polymer of modified styrene-type unit contg. acid-generating agent for chem. amplification pos. working resist)
- IT 86830-84-4P 185405-11-2P 185405-14-5P 185405-17-8P 185405-21-4P  
185405-25-8P 185405-31-6P 185405-39-4P **185405-45-2P**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymer of modified styrene-type unit contg. acid-generating agent for chem. amplification pos. working resist)
- IT **185405-45-2P**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymer of modified styrene-type unit contg. acid-generating agent for

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chem. amplification pos. working resist)

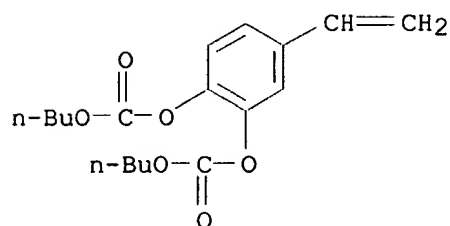
RN 185405-45-2 HCAPLUS

CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with  
4-ethenyl-1,2-benzenediol, 5-ethenyl-1,3-benzodioxole and  
4-ethenyl-1,2-phenylene bis(butyl carbonate) (9CI) (CA INDEX NAME)

CM 1

CRN 185405-30-5

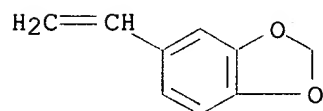
CMF C18 H24 O6



CM 2

CRN 7315-32-4

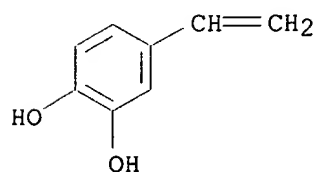
CMF C9 H8 O2



CM 3

CRN 6053-02-7

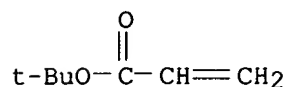
CMF C8 H8 O2



CM 4

CRN 1663-39-4

CMF C7 H12 O2



AN 1995:570667 HCAPLUS  
 DN 123:35424  
 TI Room-temperature-curable silane-terminated polyurethane dispersions, their preparation and use as coatings  
 IN Onwumere, Fidelis C.; Frisch, Kurt C.; Holland, Lowell W.; Sengupta, Ashok  
 PA Minnesota Mining and Mfg. Co., USA  
 SO PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C08G018-12  
 ICS C08G018-08  
 CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 38, 43

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413723	A1	19940623	WO 1993-US11831	19931206
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5354808	A	19941011	US 1992-986801	19921208
AU 9457413	A1	19940704	AU 1994-57413	19931206
AU 682165	B2	19970925		
EP 677072	A1	19951018	EP 1994-903486	19931206
EP 677072	B1	19990310		
R: BE, DE, ES, FR, GB, IT, NL, SE				
JP 08504230	T2	19960507	JP 1993-514314	19931206
ES 2128549	T3	19990516	ES 1994-903486	19931206
US 5554686	A	19960910	US 1995-557385	19951113

PRAI US 1992-986801 19921208  
 US 1993-109640 19930820  
 US 1993-109671 19930820  
 WO 1993-US11831 19931206

AB This invention provides aq. dispersions of externally chain-extended polyurethane compns. terminated by hydrolyzable and/or hydrolyzed silyl groups and contg. anionic solubilizing or emulsifying groups, particularly carboxyl groups. Both anionically and cationically stabilized polyurethane dispersions are prepd. The polyurethane dispersions are substantially org. solvent-free (e.g., <7% org. solvent) and cure to water- and solvent-resistant, tough, scratch-resistant, nonyellowing coatings on wood, chip-resistant coatings on automobiles, and removable coatings on vinyl plastics. A typical dispersion was manufd. by adding a prepolymer prepd. by heating 4,4'-dicyclohexylmethane diisocyanate 308.23, caprolactone-based polyol 360.72, 2,2-bis(hydroxymethyl)propionic acid 40.10, N-methylpyrrolidone 125.1, and dibutyltin dilaurate 0.081 g 2 h at 80.degree. in 10 min to a mixt. contg. water 325, Et3N 5.28, ethanediamine 6, and .gamma.-aminopropyltrimethoxysilane 6 g in a homogenizer.

ST silane terminated polyurethane dispersion coating; impact resistant polyurethane coating; aminopropyltrimethoxysilane modified polyurethane dispersion coating; bishydroxymethylpropionic polyurethane dispersion coating; caprolactone polyester polyurethane dispersion coating; cyclohexylmethane diisocyanate polyurethane dispersion coating; temporary coating vinyl plastic polyurethane; chip resistant polyurethane coating automobile; room temp curable polyurethane dispersion coating; wood coating polyurethane dispersion; weather resistant polyurethane coating; abrasion resistant polyurethane coating; solvent resistant polyurethane coating; water resistant polyurethane coating

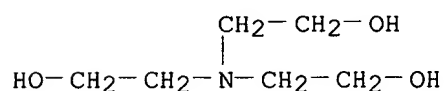
IT Silanes

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (reaction products with polyurethanes; room-temp.-curable silane-terminated polyurethane dispersions for coatings)

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- IT Urethane polymers, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Rubber, urethane, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Glass, oxide  
Leather  
RL: MSC (Miscellaneous)  
(substrate; room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Plastics  
Synthetic fibers, polymeric  
Textiles  
Glass fibers, miscellaneous  
RL: MSC (Miscellaneous)  
(substrates; room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Urethane polymers, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester-polyoxyalkylene-polyurea-, block, room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Urethane polymers, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester-polyurea-, block, room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Vinyl compounds, miscellaneous  
RL: MSC (Miscellaneous)  
(polymers, substrates; room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Urethane polymers, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyoxyalkylene-polyurea-, block, room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT Coating materials  
(water-thinned, room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT 3663-44-3DP, .gamma.-Aminopropylmethyldimethoxysilane, reaction products with polyurethanes  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(Silane Q2-8038; room-temp.-curable silane-terminated polyurethane dispersions for coatings)
- IT 4420-74-0DP, A-189, reaction products with polyurethanes 13822-56-5DP, .gamma.-Aminopropyltrimethoxysilane, reaction products with polyurethanes  
163294-96-0DP, reaction products with isocyanate-reactive silanes  
163294-98-2DP, reaction products with isocyanate-reactive silanes  
163295-00-9DP, reaction products with isocyanate-reactive silanes  
163295-02-1DP, reaction products with isocyanate-reactive silanes  
163295-04-3DP, reaction products with isocyanate-reactive silanes  
163336-22-9DP, reaction products with isocyanate-reactive silanes  
163336-24-1DP, reaction products with isocyanate-reactive silanes  
163336-26-3DP, reaction products with isocyanate-reactive silanes  
163336-28-5DP, reaction products with isocyanate-reactive silanes  
163336-30-9DP, reaction products with isocyanate-reactive silanes  
163336-32-1DP, reaction products with isocyanate-reactive silanes  
163336-34-3DP, reaction products with isocyanate-reactive silanes

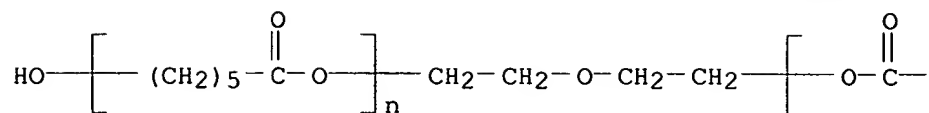
163336-36-5DP, reaction products with isocyanate-reactive silanes  
 163336-38-7DP, reaction products with isocyanate-reactive silanes  
 163336-40-1DP, reaction products with isocyanate-reactive silanes  
 163336-42-3DP, reaction products with isocyanate-reactive silanes  
 163336-44-5DP, reaction products with isocyanate-reactive silanes  
 163336-46-7DP, reaction products with isocyanate-reactive silanes  
 163336-48-9DP, reaction products with isocyanate-reactive silanes  
 164178-11-4DP, reaction products with isocyanate-reactive silanes  
 164178-13-6DP, reaction products with isocyanate-reactive silanes  
 164178-15-8DP, reaction products with isocyanate-reactive silanes  
 164231-01-0DP, reaction products with isocyanate-reactive silanes  
 164231-47-4DP, reaction products with isocyanate-reactive silanes  
 164231-49-6DP, reaction products with isocyanate-reactive silanes  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (room-temp.-curable silane-terminated polyurethane dispersions for coatings)  
 IT 152059-48-8, Acronal 296D  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (room-temp.-curable silane-terminated polyurethane dispersions for coatings)  
 IT 163336-28-5DP, reaction products with isocyanate-reactive silanes  
 163336-30-9DP, reaction products with isocyanate-reactive silanes  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (room-temp.-curable silane-terminated polyurethane dispersions for coatings)  
 RN 163336-28-5 HCAPLUS  
 CN Benzenepropanoic acid, 3,4-dihydroxy-, polymer with 1,2-ethanediamine, 1,1'-methylenebis[4-isocyanatocyclohexane] and .alpha.,.alpha.'-(oxydi-2,1-ethanediyl)bis[.omega.-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 102-71-6  
 CMF C6 H15 N O3



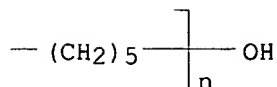
CM 2  
 CRN 163336-27-4  
 CMF (C15 H22 N2 O2 . C9 H10 O4 . (C6 H10 O2)n (C6 H10 O2)n C4 H10 O3 . C2 H8 N2)x  
 CCI PMS  
 CM 3  
 CRN 50327-24-7  
 CMF (C6 H10 O2)n (C6 H10 O2)n C4 H10 O3  
 CCI PMS



PAGE 1-A

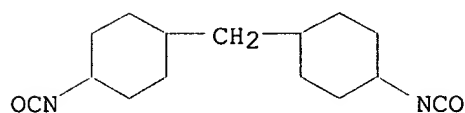


PAGE 1-B



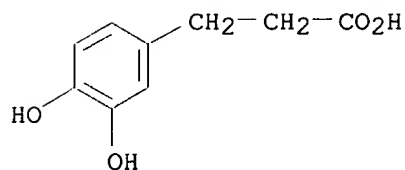
CM 4

CRN 5124-30-1  
CMF C15 H22 N2 O2



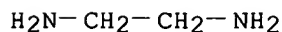
CM 5

CRN 1078-61-1  
CMF C9 H10 O4



CM 6

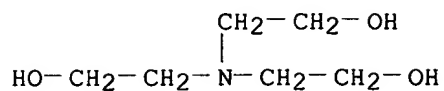
CRN 107-15-3  
CMF C2 H8 N2



RN 163336-30-9 HCAPLUS  
CN Benzenepropanoic acid, 3,4-dihydroxy-, polymer with Desmodur W, 1,2-ethanediamine and .alpha.,.alpha.'-(oxydi-2,1-ethanediyl)bis[.omega.-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6  
CMF C6 H15 N O3



CM 2

CRN 163336-29-6  
CMF (C9 H10 O4 . (C6 H10 O2)n (C6 H10 O2)n C4 H10 O3 . C2 H8 N2 .  
Unspecified)x  
CCI PMS

CM 3

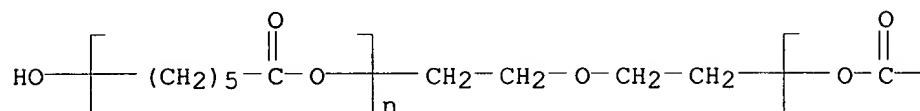
CRN 79103-62-1  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

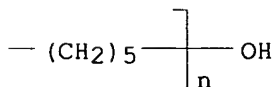
CM 4

CRN 50327-24-7  
CMF (C6 H10 O2)n (C6 H10 O2)n C4 H10 O3  
CCI PMS

PAGE 1-A

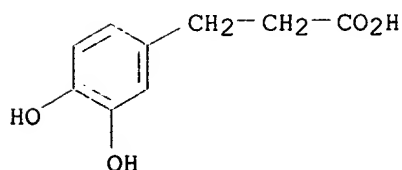


PAGE 1-B

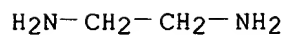


CM 5

CRN 1078-61-1  
CMF C9 H10 O4



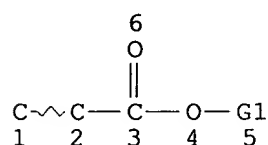
CM 6

CRN 107-15-3  
CMF C2 H8 N2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 0

=&gt; d que

L4 STR



VAR G1=AK/CY

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

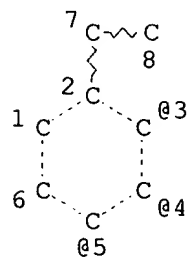
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L5 STR



OH @9

VPA 9-3/4/5 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

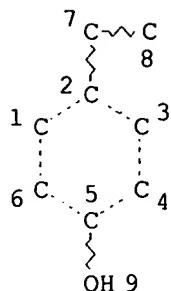
STEREO ATTRIBUTES: NONE

L7 SCR 2043

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Remaining 15 Ca ref's  
which have meta & para  
hydroxy but do  
not mention  
? resist 2

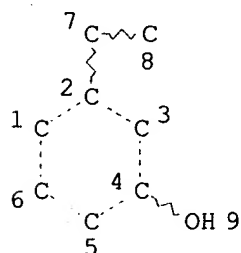
L9 5796 SEA FILE=REGISTRY SSS FUL L4 AND L5 AND L7  
 L10 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE  
 L11 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L13 16 SEA FILE=REGISTRY SUB=L9 SSS FUL (L10 AND L11)  
 L14 17 SEA FILE=HCAPLUS ABB=ON L13  
 L15 2 SEA FILE=HCAPLUS ABB=ON L14 AND ?RESIST?  
 L16 15 SEA FILE=HCAPLUS ABB=ON L14 NOT L15

=> d l16 1-15 all hitstr

L16 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1999:637835 HCAPLUS  
 DN 131:299921  
 TI Analysis of synthetic humic substances for medical and environmental  
 applications by capillary zone electrophoresis  
 AU Schmitt-Kopplin, Ph.; Freitag, D.; Kettrup, A.; Hertkorn, N.; Schoen, U.;  
 Klocking, R.; Helbig, B.; Andreux, F.; Garrison, A. W.  
 CS GSF, Forschungszentrum fur Umwelt und Gesundheit, Institut fur Okologische  
 Chemie, Neuherberg, D-85764, Germany  
 SO Analysis (1999), 27(5), 390-396  
 CODEN: ANLSCY, ISSN: 0365-4877

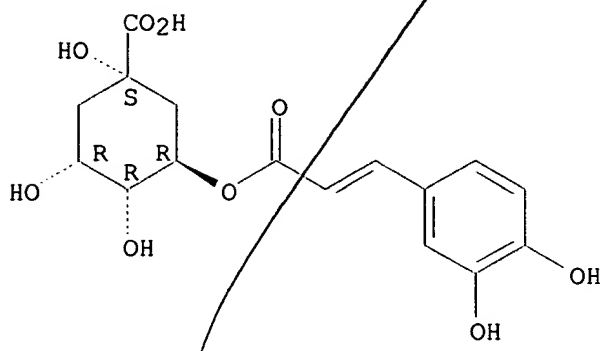
KATHLEEN FULLER EIC 1700 308-4290

PB EDP Sciences  
 DT Journal  
 LA English  
 CC 36-4 (Physical Properties of Synthetic High Polymers)  
 Section cross-reference(s): 77, 80  
 AB Capillary electrophoretic methods (CZE, CIEF) are useful tools for the anal. of the electrophoretic behavior of anionic polyelectrolytes like humic substances. The humic substances give an homogeneous signal in CZE with a Gaussian distribution of the detection signals around an av. electrophoretic mobility (AEM) corresponding to the charge d. distribution of the humic substances governed by their mol. size and their acidities. Natural humic substances as well as phenolic polymerizates are only present as anions and the presented electrophoretic methods can be used as a tool for the rapid evaluation of their relative charge densities, an important parameter when studying their reactivity towards org. and metallic species.  
 ST synthetic humic substance capillary zone electrophoresis; polyphenolic synthetic humic substance capillary zone electrophoresis; polyhydroxycarboxylate synthetic humic substance capillary zone electrophoresis  
 IT NMR (nuclear magnetic resonance)  
 (NMR of rutin and humic acids)  
 IT Capillary zone electrophoresis  
 (anal. of synthetic humic substances for medical and environmental applications by capillary zone electrophoresis)  
 IT Humic acids  
 Humus  
 RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
 (anal. of synthetic humic substances for medical and environmental applications by capillary zone electrophoresis)  
 IT Hydroxy carboxylic acids  
 Phenols, processes.  
 RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
 (polymers; anal. of synthetic humic substances for medical and environmental applications by capillary zone electrophoresis)  
 IT 153-18-4, Rutin  
 RL: PRP (Properties)  
 (NMR of rutin and synthetic humic acids)  
 IT 26982-53-6, Catechol polymer 31387-49-2, Gallic acid polymer 36733-15-0, Poly(gentisinic acid) 70727-01-4, Catechol-Glycine copolymer 71693-97-5, Caffeic acid polymer 71693-98-6, Chlorogenic acid polymer 247030-84-8  
 RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
 (anal. of synthetic humic substances for medical and environmental applications by capillary zone electrophoresis)  
 IT 71693-98-6, Chlorogenic acid polymer  
 RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)  
 (anal. of synthetic humic substances for medical and environmental applications by capillary zone electrophoresis)  
 RN 71693-98-6 HCAPLUS  
 CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 327-97-9  
 CMF C16 H18 O9

Absolute stereochemistry.

KATHLEEN FULLER EIC 1700 308-4290

Double bond geometry unknown.



L16 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1998:76151 HCAPLUS

DN 128:186524

TI Negative-working lithographic printing plate with improved printing durability

IN Aoshima, Katsataro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41C001-055

ICS G03F007-00; G03F007-033

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10029292	A2	19980203	JP 1996-187940	19960717
AB	The material comprises .gtoreq.1 (meth)acrylate polymer having hydroxyaryl in a side chain, a crosslinking agent crosslinkable with an acid, an acid-generating compd. by light or heat, and an IR absorbing agent. The plate is useful for neg.-type lithog. direct printing by solid-state or semiconductor laser exposure.				
ST	neg working photosensitive lithog printing plate; laser exposure photosensitive lithog printing plate; polyacrylate polymethacrylate photosensitive lithog plate				
IT	Phenolic resins, preparation				
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)				
	(crosslinking agents; neg.-working lithog. printing plate with improved printing durability)				
IT	Crosslinking agents				
	(neg.-working lithog. printing plate with improved printing durability)				
IT	Printing plates				
	(photosensitive; neg.-working lithog. printing plate with improved printing durability)				
IT	110726-28-8, Trisp PA				
	RL: RCT (Reactant)				
	(Trisp PA; neg.-working lithog. printing plate with improved printing durability)				
IT	6293-66-9	10409-06-0	54769-57-2	130536-25-3	159300-88-6
	185502-15-2	203179-97-9			
	RL: MOA (Modifier or additive use); USES (Uses)				
	(acid-generating agents; neg.-working lithog. printing plate with improved printing durability)				

KATHLEEN FULLER EIC 1700 308-4290

IT 25085-75-0P, Bisphenol A-formaldehyde copolymer 161679-94-3P  
 162846-57-3P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (crosslinking agents; neg.-working lithog. printing plate with improved printing durability)

IT 531-18-0, Hexamethylolmelamine 185502-11-8 197087-73-3 197087-74-4  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinking agents; neg.-working lithog. printing plate with improved printing durability)

IT 123-30-8, p-Aminophenol 920-46-7, Methacryloyl chloride  
 RL: RCT (Reactant)  
 (monomer prepn. starting materials; neg.-working lithog. printing plate with improved printing durability)

IT 203179-80-0P, Ethyl methacrylate-N-(p-hydroxyphenyl)methacrylamide copolymer 203179-81-1P, Benzyl acrylate-2-(p-hydroxyphenyl)ethyl methacrylate copolymer 203179-83-3P **203179-84-4P**  
 203179-85-5P 203179-87-7P 203179-88-8P 203179-90-2P 203179-92-4P 203179-94-6P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (neg.-working lithog. printing plate with improved printing durability)

IT 161679-95-4 161679-98-7 185502-14-1  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (neg.-working lithog. printing plate with improved printing durability)

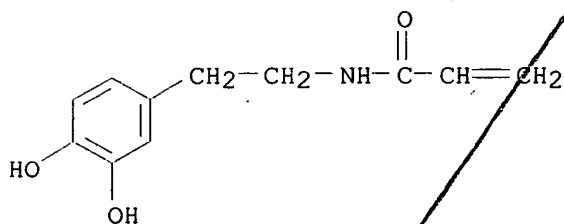
IT 501-94-0, 2-(4-Hydroxyphenyl)ethyl alcohol  
 RL: RCT (Reactant)  
 (neg.-working lithog. printing plate with improved printing durability)

IT **203179-84-4P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (neg.-working lithog. printing plate with improved printing durability)

RN 203179-84-4 HCAPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with N-[2-(3,4-dihydroxyphenyl)ethyl]-2-propenamide (9CI) (CA INDEX NAME)

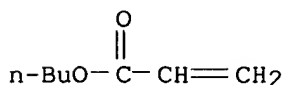
CM 1

CRN 201610-44-8  
 CMF C11 H13 N O3



CM 2

CRN 141-32-2  
 CMF C7 H12 O2



L16 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1997:469976 HCAPLUS

DN 127:80574

TI Caffeine imprint polymer

IN Hay, Philip; Leigh, David; Liardon, Remy

PA Societe Des Produits Nestle S.A., Switz.

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A23F005-18

ICS C07D473-12

CC 17-13 (Food and Feed Chemistry)

FAN.CNT 1

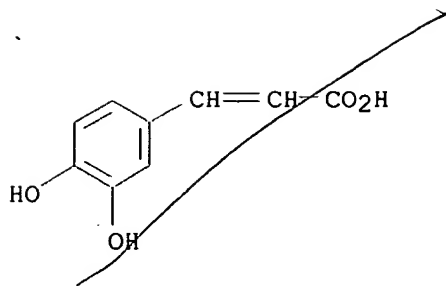
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 776607	A1	19970604	EP 1995-203394	19951207
AB	<p>R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE</p> <p>An important polymer having noncovalent recognition sites for caffeine, capable of selectively removing caffeine from an aq. ext. derived from green or roasted coffee beans is disclosed. A process for extg. caffeine from an aq. ext. derived from green or roasted coffee beans, in which the ext. is contacted with an imprint polymer having noncovalent recognition sites for caffeine and capable of selectively removing caffeine from an aq. ext. to decaffeinate a coffee ext. derived from roasted coffee beans.</p>				
ST	caffeine removal coffee imprint polymer				
IT	Coffee beans				
	(green; caffeine imprint polymer for decaffeination of coffee)				
IT	Polymers, biological studies				
	RL: BPR (Biological process); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses)				
	(imprint; caffeine imprint polymer for decaffeination of coffee)				
IT	Coffee beans				
	(roasted; caffeine imprint polymer for decaffeination of coffee)				
IT	79-41-4, Methacrylic acid, biological studies 149-91-7, Gallic acid, biological studies 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 25133-90-8 71206-36-5 191793-25-6 191793-29-0 191793-32-5 191793-35-8 191793-37-0 191793-40-5 191793-42-7				
	RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)				
	(caffeine imprint polymer for decaffeination of coffee)				
IT	58-08-2, Caffeine, processes				
	RL: REM (Removal or disposal); PROC (Process)				
	(caffeine imprint polymer for decaffeination of coffee)				
IT	191793-42-7				
	RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)				
	(caffeine imprint polymer for decaffeination of coffee)				
RN	191793-42-7 HCAPLUS				
CN	2-Propenoic acid, 3-(3,4-dihydroxyphenyl)-, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)				

CM 1

CRN 331-39-5

CMF C9 H8 O4

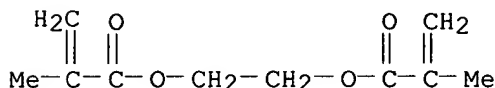




CM 2

CRN 97-90-5

CMF C10 H14 O4



L16 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1997:333438 HCAPLUS

DN 127:44452

TI Anti-herpes simplex virus type 1 activity of humic acid-like polymers and their o-diphenolic starting compounds

AU Helbig, B.; Klocking, R.; Wutzler, P.

CS Inst. Antiviral Chemotherapy, Friedrich Schiller Univ. Jena, Erfurt, D-99089, Germany

SO Antiviral Chem. Chemother. (1997), 8(3), 265-273

CODEN: ACCHEH; ISSN: 0956-3202

PB International Medical Press

DT Journal

LA English

CC 1-3 (Pharmacology)

AB Phenolic polymers of the humic acid (HA) type, like other polyanionic substances, are inhibitors of herpes simplex virus type 1 (HSV-1) replication. The antiviral potency of the low mol. wt. (MW) phenolic starting compds. has not been investigated systematically up to now. To reveal possible relationships between the chem. structure of o-diphenolic starting compds. and the anti-HSV-1 activity of HA-like polymers, nine polymers were synthesized by oxidn. of the corresponding o-dihydroxybenzene derivs. They were characterized by MW distribution, Fourier transform infra-IR spectra and functional group anal. Using an XTT-based tetrazolium redn. assay, both the low MW starting compds. and the synthesized polymers were examd. for their antiviral and cytotoxic activities in HSV-1-infected Vero cells. The results demonstrate that most of the starting compds. failed to inhibit herpesvirus replication. The polymeric oxidn. products (OP), however, developed detectable anti-HSV-1 activity with IC50 values in the range 2.3 [the OP of 3,4 dihydroxycinnamic acid (caffeic acid); KOP] to 42.1 .mu.g mL-1 (3,4-dihydroxytoluene OP). The CC50 of polymers varied between 40.8 (3,4-dihydroxybenzaldehyde OP) and >128 .mu.g mL-1 (most polymers). Functional group anal. revealed that the presence of carboxylic groups in the starting compds. enhanced the antiviral activity and reduced the cytotoxicity of polymers. The introduction of a C=C double bond into the side chain [i.e. caffeic acid; 3-O-(3,4-dihydroxycinnamoyl)-D-chinic acid (chlorogenic acid; CH)] yielded the most effective polymers (KOP, CHOP). These may be considered as leader substances for HSV-1 inhibitors of the HA type.

ST antiherpes diphenol polymer humic acid structure

IT Antiviral structure-activity relationship

Human herpesvirus 1

KATHLEEN FULLER EIC 1700 308-4290

IT Humic acids  
RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(anti-herpes simplex virus type 1 activity of humic acid-like polymers  
and their o-diphenolic starting compds.)

IT 99-50-3, Protocatechuic acid 102-32-9, 3,4-Dihydroxyphenylacetic acid  
120-80-9, Catechol, biological studies 139-85-5, 3,4-  
Dihydroxybenzaldehyde 327-97-9, Chlorogenic acid 331-39-5, Caffeic  
acid 452-86-8, 3,4-Dihydroxytoluene 1078-61-1, Hydrocaffeic acid  
3943-89-3, 3,4-Dihydroxybenzoic acid ethyl ester 26982-53-6, Catechol  
polymer 37300-21-3 71693-95-3, Hydrocaffeic acid polymer 71693-96-4,  
Protocatechuic acid polymer 71693-97-5, Caffeic acid polymer  
71693-98-6, Chlorogenic acid polymer 71693-99-7 71694-00-3,  
3,4-Dihydroxyphenylacetic acid polymer 158902-71-7 191167-55-2  
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or  
effector, except adverse); THU (Therapeutic use); BIOL (Biological study);  
USES (Uses)  
(anti-herpes simplex virus type 1 activity of humic acid-like polymers  
and their o-diphenolic starting compds.)

IT 71693-98-6, Chlorogenic acid polymer  
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or  
effector, except adverse); THU (Therapeutic use); BIOL (Biological study);  
USES (Uses)  
(anti-herpes simplex virus type 1 activity of humic acid-like polymers  
and their o-diphenolic starting compds.)

RN 71693-98-6 HCAPLUS

CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-  
propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA  
INDEX NAME)

CM 1.

CRN 327-97-9

CMF C16 H18 O9

OC(=O)C1C(S)C(R)C(R)C(O)C1OC(=O)CC=Cc1ccc(O)c(O)c1

KATHLEEN FULLER EIC 1700 308-4290

LA German  
 IC ICM G03C001-04  
 ICS G03C007-305; G03C007-396  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 766129	A1	19970402	EP 1996-114796	19960916
	R: DE, FR, GB, IT				
	DE 19535939	A1	19970403	DE 1995-19535939	19950927
	US 5726004	A	19980310	US 1996-715197	19960918
	JP 09114059	A2	19970502	JP 1996-271495	19960920

PRAI DE 1995-19535939 19950927

AB In the title material comprising at least one light-sensitive Ag halide emulsion layer and at least one light-insensitive layer on a support, the material contains at least one polysiloxane compd. represented by a formula  $R_1(OSiR_2R_3)_n(OSiR_4(L-PUG))_mR_5$  [ $R_1 = H, alkyl, SiMe_3$ , single bond connecting to  $R_5$ ;  $R_2, R_4 = OH, alkoxy, alkyl, Ph, OSiMe_3, OSiOR_6$ ;  $R_3 = alkyl, aryl, alkenyl$ ;  $R_5 = OH, alkoxy, OSiMe_3$ , single bond connecting to  $R_1$ ;  $R_6 = alkyl$ ;  $L =$  divalent connecting group;  $PUG =$  photog. useful group;  $n = 0-100$ ;  $m = 2-100$ ]. The polysiloxane compd. may be a photog. stabilizer, photog. coupler or UV-absorber.

ST photog material polysiloxane stabilizer

IT Photographic films

Photographic paper

Photographic stabilizers

(color; photog. material with polysiloxane stabilizer)

IT Photographic couplers

(photog. material with polysiloxane stabilizer)

IT Polysiloxanes, uses

RL: MOA (Modifier or additive use); USES (Uses)

(polysiloxane additive to photog. material)

IT 188784-52-3 188784-53-4 188784-55-6 188784-57-8D,  
 trimethylsilane-terminated 188784-58-9 188784-60-3 188784-97-6

RL: MOA (Modifier or additive use); USES (Uses)

(UV-absorber; polysiloxane additive to photog. material)

IT 188784-69-2 188784-70-5 188784-72-7D, trimethylsilane-terminated  
 188784-73-8 188784-75-0 188784-77-2D, trimethylsilane-terminated  
 188784-78-3 188784-80-7 188784-81-8 188784-83-0 188784-84-1  
 188784-86-3

RL: MOA (Modifier or additive use); USES (Uses)

(coupler; polysiloxane additive to photog. material)

IT 188784-26-1 188784-29-4 188784-30-7 188784-32-9 188784-33-0

188784-36-3 188784-37-4 188784-40-9 188784-42-1

188784-44-3 188784-47-6 188784-50-1 188784-62-5

188784-63-6 188784-64-7 188784-66-9 188784-67-0 188784-89-6

188784-91-0 188784-92-1 188784-94-3 188784-95-4

RL: MOA (Modifier or additive use); USES (Uses)

(stabilizer; polysiloxane additive to photog. material)

IT 188784-88-5D, trimethylsilane-terminated

RL: MOA (Modifier or additive use); USES (Uses)

(stabilizer; polysiloxane additive to trimethylsilane-terminate photog. material)

IT 188784-42-1 188784-44-3

RL: MOA (Modifier or additive use); USES (Uses)

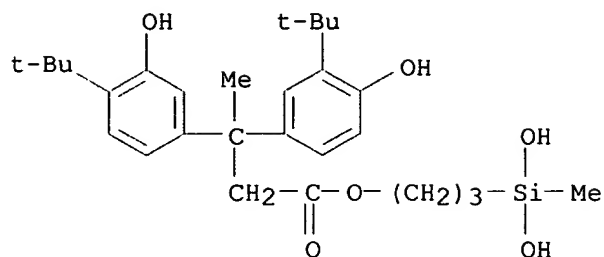
(stabilizer; polysiloxane additive to photog. material)

RN 188784-42-1 HCAPLUS

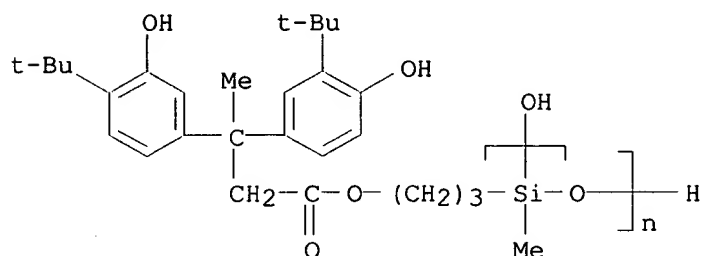
CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-.beta.-[4-(1,1-dimethylethyl)-3-hydroxyphenyl]-4-hydroxy-.beta.-methyl-, 3-(dihydroxymethylsilyl)propyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 188784-41-0  
CMF C28 H42 O6 Si



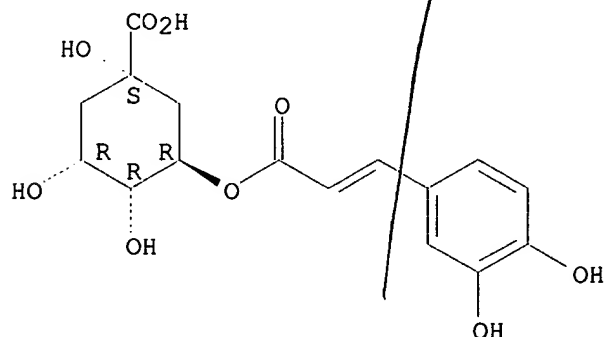
RN 188784-44-3 HCAPLUS  
CN Poly[oxy[[3-[3-[3-(1,1-dimethylethyl)-4-hydroxyphenyl]-3-[4-(1,1-dimethylethyl)-3-hydroxyphenyl]-1-oxobutoxy]propyl]methylsilylene]],  
.alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)



L16 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
AN 1992:524060 HCAPLUS  
DN 117:124060  
TI Poly(hydroxy)carboxylates as selective inhibitors of cytomegalovirus and herpes simplex virus replication  
AU Neyts, J.; Snoeck, R.; Wutzler, P.; Cushman, M.; Kloecking, R.; Helbig, B.; Wang, P.; De Clercq, E.  
CS Rega Inst. Med. Res., Kathol. Univ. Leuven, Louvain, B-3000, Belg.  
SO Antiviral Chem. Chemother. (1992), 3(4), 215-22  
CODEN: ACCHEH; ISSN: 0956-3202  
DT Journal  
LA English  
CC 1-5 (Pharmacology)  
AB Polyhydroxycarboxylates (MW 3800-14000) derived from phenolic (PDP) compds. were found to be selective inhibitors of human cytomegalovirus (CMV), herpes simplex virus type 1 (HSV-1), type 2 (HSV-2), thymidine kinase-deficient (TK-) HSV-1 and vaccinia virus replication at concns. that are not toxic to the host cells. The PDP compds. were not inhibitory to parainfluenza virus, reovirus, Sindbis virus, or Semliki forest virus. The polycarboxylate aurintricarboxylic acid (ATA) (MW 1149-3336) also proved inhibitory to CMV and HSV replication. The anti-CMV and anti-HSV activities of the ATA polymers increased with increasing mol. wt. The mechanism of anti-CMV activity of both the PDP and ATA series of compds. can be attributed to the inhibition of virion attachment to the cells, probably due to an interaction of these polyanionic compds. with the pos. charged domains of the viral envelope glycoproteins.  
ST antiviral polyhydroxy carboxylate; phenol polyhydroxycarboxylate  
IT antiviral; polycarboxylate aurintricarboxylic acid antiviral  
IT Virucides and Virustats  
IT (poly(hydroxy)carboxylates as)  
IT Glycoproteins, specific or class

KATHLEEN FULLER EIC 1700 308-4290

Absolute stereochemistry.  
Double bond geometry unknown.



TI Synthetic organic polymers for the selective flocculation of titanium and iron ores  
 IN Bertini, Vincenzo; Marabini, Anna; De Munno, Angela; Barbaro, Maria; Pocci, Marco  
 PA Consiglio Nazionale delle Ricerche, Italy  
 SO U.S., 10 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C09K003-00  
 NCL 252060000  
 CC 54-1 (Extractive Metallurgy)  
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4698171	A	19871006	US 1986-818305	19860113
AB	Flocculating agents suitable for Ti and Fe ore fines are polymers or copolymers contg. a monomeric unit R1(R2)PhR3(R4). R1 and R2 represent -OCHR5O- bridge, or 2 OH- groups in the form of their ether or ester derivs. One of R3, R4, or R5 contains a polymerizable system (preferably olefinic), and the others are H, alkyl, aryl, OH, alkoxy, hydroxyalkyl, alkoxyalkyl, haloalkyl, carbonyl, carboxyl, ester, amido, nitrilo, sulfonic, halogen, and/or nitro groups. Hydrophilic character of the copolymers is related to ore slurry pH. The flocculating agents are suitable for rutile, ilmenite, or hematite ore fines. Thus, 3,4-methylenedioxybenzyl acrylate-acrylic acid copolymer (I) was suitable for flocculation of rutile ore fines having .gtoreq.20 .mu. particle size. The copolymer was effective at pH 3.5-9.5 and concn. 10-100 ppm with higher concn. required at higher pH. The I copolymer was prepd. from a mixt. of dioxane 4 mL, acrylic acid 5.124 g, 3,4-methylenedioxybenzyl acrylate 1.639 g, and AIBN 69 mg. The mixt. was sealed under dry N into a vial, reacted for 90 min at 60.degree., purified by repptn., and sepd. by fractionation to obtain av. mol. wt. .apprx.33,000.				
ST	titanium iron ore flocculation copolymer; acrylic acid copolymer flocculation ore; acrylate copolymer flocculation ore; copolymer flocculation titanium ore				
IT	Titanium ores Iron ores, uses and miscellaneous RL: USES (Uses) (fines, flocculation of, org. polymers for selective)				
IT	Flocculating agents (polymers, for iron and titanium ores)				
IT	12168-52-4, Ilmenite		14808-60-7, uses and miscellaneous		
	RL: PROC (Process) (ore fines contg., flocculation of, copolymers for)				
IT	1317-60-8, uses and miscellaneous		1317-80-2		
	RL: USES (Uses) (ore fines contg., flocculation of, copolymers for)				
IT	109549-35-1P	109549-36-2P	109549-37-3P	109549-42-0P	109549-44-2P
	109549-54-4P	109549-63-5P	109549-65-7P	109575-50-0P	112265-17-5P
	112265-18-6P RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of, for flocculant for iron and titanium ores)				
IT	90560-16-0P	90649-89-1P	109549-34-0P	109549-41-9P	109549-43-1P
	109549-53-3P	109549-60-2P	109549-62-4P	109549-64-6P	113303-79-0P
	RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of, in manuf. of flocculants for iron and titanium ores)				
IT	120-57-0, Piperonylaldehyde		120-80-9, uses and miscellaneous		625-36-5
	814-68-6, Acryloyl chloride		1073-67-2, 4-Chlorostyrene		6515-06-6
	7439-95-4, uses and miscellaneous		7459-73-6		
	RL: PROC (Process) (reaction mixts. contg., for flocculants for iron and titanium ores)				
IT	78-67-1, AIBN		79-10-7, uses and miscellaneous		109549-41-9

KATHLEEN FULLER EIC 1700 308-4290

RL: PROC (Process)  
(reaction mixts. contg., in flocculant manuf. for iron and titanium ores)

IT 112265-18-6P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(prepn. of, for flocculant for iron and titanium ores)

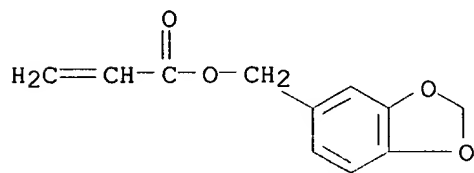
RN 112265-18-6 HCAPLUS

CN 2-Propenoic acid, polymer with 1,3-benzodioxol-5-ylmethyl 2-propenoate and 1-(3,4-dihydroxyphenyl)-2-propen-1-one (9CI) (CA INDEX NAME)

CM 1

CRN 109549-34-0

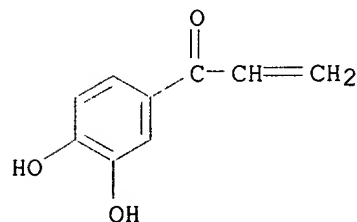
CMF C11 H10 O4



CM 2

CRN 90560-16-0

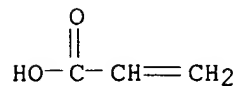
CMF C9 H8 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2



L16 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1988:60010 HCAPLUS

DN 108:60010

TI Synthetic organic polymers for selective flocculation of titanium and iron ores

IN Bertini, Vincenzo; Marabini, Anna; De Munno, Angela; Barbaro, Maria; Pocci, Marco

PA Consiglio Nazionale delle Ricerche, Italy

SO Eur. Pat. Appl., 17 pp.

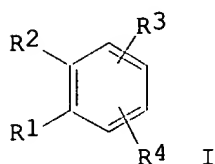
CODEN: EPXXDW

KATHLEEN FULLER EIC 1700 308-4290

DT Patent  
 LA English  
 IC ICM C08F012-02  
 ICS C02F001-54  
 CC 54-1 (Extractive Metallurgy)  
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 232679	A1	19870819	EP 1986-830014	19860120
	EP 232679	B1	19900725		
	R: FR				
	CN 86100669	A	19870805	CN 1986-100669	19860120
PRAI	EP 1986-830014		19860120		
GI					



AB The flocculating polymers selective for Ti and Fe ores (esp. as fines of <20-.mu. size) have monomer formula I, where R1 and R2 are bridging group OCHR5O, OH-, or ether or ester derivs.; and R3, R4, and/or R5 are a polymerizable system (esp. olefinic) as well as H, alkyl, aryl, OH-, alkoxyl, hydroxylalkyl, alkoxyalkyl, haloalkyl, carbonyl, carboxyl, ester, amido, nitrilo, sulfonic, halide, or nitro groups. Mineral fines in a slurry can be recovered at high yields by flocculation at a controlled pH. Thus, 3,4-methylenedioxybenzyl acrylate-acrylic acid copolymer was prep'd. from a mixt. contg. dioxane 4 mL, acrylic acid 5.124 g, 3,4-methylenedioxybenzyl acrylate 1.639 g, and AlBN 69 mg. The mixt. was heated with stirring for 90 min at 60.degree., and poured into benzene for pptn. and purifn. Av. mol. wt. was 35,000 daltons. Powd. rutile of 98% purity and .ltoreq.20-.mu. size dispersed in water showed flocculation at pH 3.5 from slurries contg. 10-100 ppm copolymer.

ST titanium ore flocculation org polymer; iron ore flocculation org polymer; acrylate copolymer flocculation rutile ore; acrylic acid copolymer flocculation ore

IT Titanium ores  
 Iron ores, uses and miscellaneous  
 RL: USES (Uses)  
 (flocculation of dispersed, org. polymers addn. for selective)

IT Elimination reaction  
 Grignard reaction  
 (in flocculating agent prepn.)

IT Flocculating agents  
 (org. polymers, for iron and titanium ores)

IT 1317-80-2  
 RL: PROC (Process)  
 (flocculation of, acrylate copolymer for, acidity effect on)

IT 12168-52-4 14808-60-7, uses and miscellaneous  
 RL: PROC (Process)  
 (flocculation of, org. polymers for)

IT 1317-60-8, uses and miscellaneous  
 RL: USES (Uses)  
 (flocculation of, org. polymers for)

IT 109549-54-4 109549-63-5 109549-65-7 112265-17-5 112265-18-6  
 RL: PROC (Process)  
 (flocculation with, of iron and titanium ore fines in slurry)

KATHLEEN FULLER EIC 1700 308-4290



IT 109549-35-1 109549-36-2 109549-37-3 109549-42-0 109549-44-2  
 109575-50-0  
 RL: PROC (Process)  
 (flocculation with, of iron and titanium ore fines, acidity control in)

IT 90560-16-0P 109549-34-0P 109549-41-9P 109549-43-1P 109549-53-3P  
 109549-60-2P 109549-62-4P 109549-64-6P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manuf. and polymn. of, for flocculating agent)

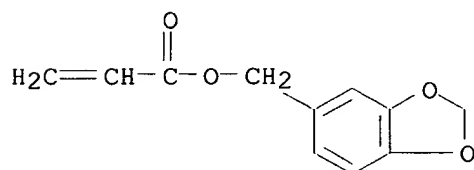
IT 108-24-7 120-57-0 120-80-9, Pyrocatechol, uses and miscellaneous  
 121-44-8, uses and miscellaneous 495-76-1, Piperonyl alcohol 625-36-5  
 814-68-6, Acryloyl chloride 1073-67-2, 4-Chlorostyrene 6515-06-6  
 7439-95-4, uses and miscellaneous 7459-73-6 90649-89-1  
 RL: PROC (Process)  
 (reaction mixts. contg., flocculating agents from, for titanium and  
 iron ores)

IT 112265-18-6  
 RL: PROC (Process)  
 (flocculation with, of iron and titanium ore fines in slurry)

RN 112265-18-6 HCAPLUS  
 CN 2-Propenoic acid, polymer with 1,3-benzodioxol-5-ylmethyl 2-propenoate and  
 1-(3,4-dihydroxyphenyl)-2-propen-1-one (9CI) (CA INDEX NAME)

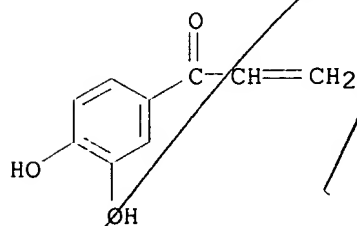
CM 1

CRN 109549-34-0  
 CMF C11 H10 O4



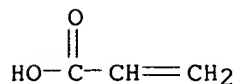
CM 2

CRN 90560-16-0  
 CMF C9 H8 O3



CM 3

CRN 79-10-7  
 CMF C3 H4 O2



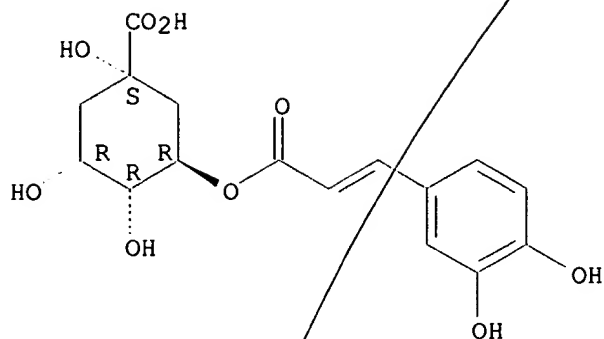
L16 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
AN 1987:407897 HCAPLUS  
DN 107:7897  
TI Synthesis and characterization of humic acid-like polymers  
AU Hanninen, K. I.; Klocking, R.; Helbig, B.  
CS Dep. Chem., Univ. Joensuu, Joensuu, SF-80101, Finland  
SO Sci. Total Environ. (1987), 62, 201-10  
CODEN: STENDL; ISSN: 0048-9697  
DT Journal  
LA English  
CC 36-2 (Physical Properties of Synthetic High Polymers)  
Section cross-reference(s): 19, 35, 51, 60  
AB Phenolic polymers were synthesized by oxidn. of homogeneous and well defined starting materials with NaIO<sub>4</sub> and were characterized by C-13 NMR spectrometry. Signals due to phenolic, arom. (olefinic), and CO<sub>2</sub>H carbons were obsd. for each polymer. During the oxidative polymn. of o- and p-diphenolic compds., a partial dearomatization occurred.  
ST humic acid like polymer; polyoxyphenylene humic acid like; structure phenolic polymer humic acid; NMR phenolic polymer humic acid; oxidative polymn diphenol humic acid  
IT Polymers, properties  
RL: PRP (Properties)  
(diphenol-based, humic acid-like, structure of)  
IT Humic acids  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and structural studies of diphenol oxidn. polymers as models for)  
IT Chains, chemical  
(structure of, of humic acid-like polymers prepd. from diphenols)  
IT Polymerization  
(oxidative, of diphenols, prepn. of humic acid-like polymers from)  
IT 26982-53-6P, Polycatechol 36733-15-0P, Poly(gentisinic acid)  
71693-95-3P, Poly(hydrocaffeic acid) 71693-96-4P, Poly(protocatechuic acid) 71693-97-5P 71693-98-6P, Poly(chlorogenic acid)  
71693-99-7P, Poly(3,4-dihydroxytoluene) 71694-00-3P,  
Poly(3,4-dihydroxyphenylacetic acid) 108657-62-1P, Polyadrenaline  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and structure of)  
IT 71693-98-6P, Poly(chlorogenic acid)  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and structure of)  
RN 71693-98-6 HCAPLUS  
CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 327-97-9

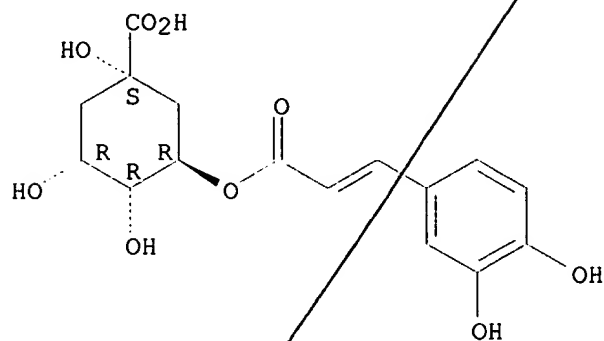
CMF C16 H18 O9

Absolute stereochemistry.  
Double bond geometry unknown.



L16 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1987:188514 HCAPLUS  
 DN 106:188514  
 TI Effect of phenolic polymers on retroviruses  
 AU Sydow, G.; Wunderlich, V.; Kloecking, Renate; Helbig, B.  
 CS Zentralinst. Krebsforsch., Dtsch. Akad. Wiss., Berlin, Ger. Dem. Rep.  
 SO Pharmazie (1986), 41(12), 865-8  
 CODEN: PHARAT; ISSN: 0031-7144  
 DT Journal  
 LA German  
 CC 1-5 (Pharmacology)  
 AB Polycaffeic acid [71693-97-5], polychlorogenic acid [71693-98-6], and polygentisic acid [36733-15-0], formed by the enzymic oxidn. of the resp. monomeric acids, strongly inhibited purified retroviral reverse transcriptase [9068-38-6] in vitro. The inhibition was reversed by the addn. of bovine serum albumin to the system, except in the cases of enzymes from 2 type C retroviruses. The polymers did not affect the propagation of retroviruses in cell culture. The replication of Rauscher leukemia virus in mice was diminished by preincubation of the virus in the form of a suspension with polycaffeic acid, but when the virus was in serum during the preincubation, the polymer increased its replication in vivo. Administration of a high dose of polycaffeic acid to mice following virus inoculation further increased reverse transcriptase activities and spleen wts. compared with infected controls not given the polymer. These polyphenols cannot be considered as potential virustats against retroviruses but are of interest for further characterization of reverse transcriptase.  
 ST polymeric phenol antiviral retrovirus; reverse transcriptase retrovirus polyphenol  
 IT Virucides and Virustats  
 (polymeric phenols as, against retroviruses)  
 IT Phenolic resins, biological studies  
 RL: BIOL (Biological study)  
 (retroviruses and retroviral reverse transcriptase response to)  
 IT 9068-38-6, Reverse transcriptase  
 RL: BIOL (Biological study)  
 (of retroviruses, polymeric phenols effect on)  
 IT 36733-15-0 71693-97-5 71693-98-6  
 RL: BIOL (Biological study)  
 (retroviruses and retroviral reverse transcriptase response to)  
 IT 71693-98-6  
 RL: BIOL (Biological study)  
 (retroviruses and retroviral reverse transcriptase response to)  
 RN 71693-98-6 HCAPLUS  
 CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 327-97-9  
CMF C16 H18 O9Absolute stereochemistry.  
Double bond geometry unknown.

L16 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1987:2733 HCAPLUS

DN 106:2733

TI Inhibitory effect of phenolic polymers on different strains of influenza virus type A and B

AU Hils, Jutta; May, Annelies; Sperber, M.; Kloecking, Renate; Helbig, B.; Sproessig, M.

CS Inst. Angewandte Virol., Berlin, 1190, Ger. Dem. Rep.

SO Biomed. Biochim. Acta (1986), 45(9), 1173-9

CODEN: BBIADT; ISSN: 0232-766X

DT Journal

LA German

CC 10-5 (Microbial Biochemistry)

AB Ten synthetic polymers of diphenolic compds. (caffeic acid [KOP], hydroxycaffeic acid [HYKOP], chlorogenic acid [CHOP], 3,4-dihydroxytoluene [3,4-DHTOP], Na adrenalin [Na-ADROP], NH4-ADROP, Na noradrenalin [Na-NORADROP], NH4-NORADROP, gentisic acid [GENOP], and 2,5-dihydroxytoluene [2,5-DHTOP]) as well as 2 phenolic polymers of natural origin (Na humate, NH4 humate) were tested for their effectiveness on several strains of influenza virus type A and B. The allantoic egg shell-system was used for primary screening. Virus multiplication was assessed by means of the infectious titer. All substances tested exerted inhibitory effects on influenza virus type A, while 3,4-DHTOP, Na-ADROP, NH4-ADROP and GENOP were effective against either type. The highest titer redns. (>4.0 log 10 ID50) were obtained with KOP and HYKOP against influenza virus A/Brasil/11/78 and with 3,4-DHTOP, KOP and HYKOP against influenza virus A/Hongkong/1/68. GENOP only showed antiviral activity against all virus strains tested so far.

ST phenolic polymer virucide influenza virus

IT Humic acids

RL: BIOL (Biological study)

(ammonium and sodium salts, influenza virus inhibition by)

IT Virucides and Virustats

(phenolic polymers as)

IT Polymers, biological studies

RL: BIOL (Biological study)

(phenolic, as virucides)

IT Virus, animal

(influenza A, inhibition of, by phenolic polymers)

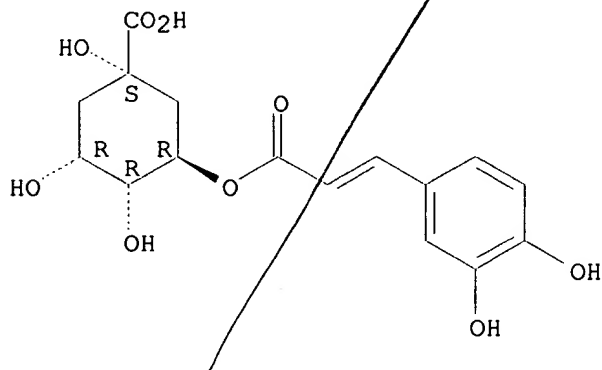
IT Virus, animal

(influenza B, inhibition of, by phenolic polymers)

KATHLEEN FULLER EIC 1700 308-4290

IT 36733-15-0 71693-95-3 71693-97-5 71693-98-6 71693-99-7  
 105569-77-5 105569-79-7 105569-81-1 105569-83-3 105569-84-4  
 RL: BIOL (Biological study)  
 (influenza virus inhibition by)  
 IT 71693-98-6  
 RL: BIOL (Biological study)  
 (influenza virus inhibition by)  
 RN 71693-98-6 HCAPLUS  
 CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 327-97-9  
 CMF C16 H18 O9

Absolute stereochemistry.  
 Double bond geometry unknown.



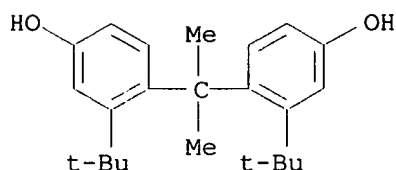
L16 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1986:208277 HCAPLUS  
 DN 104:208277  
 TI Polyhydric phenol dicarboxylate-carbonate coesters  
 IN Leistner, William Edward; Minagawa, Motonobu; Nakahara, Yutaka; Haruna, Tohru  
 PA Adeka Argus Chemical Co., Ltd., Japan  
 SO Indian, 54 pp.  
 CODEN: INXXAP  
 DT Patent  
 LA English  
 IC ICM C07C069-92  
 CC 37-3 (Plastics Manufacture and Processing)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IN 155902	A	19850323	IN 1977-CA375	19770314
PRAI	GB 1976-46518		19761109		

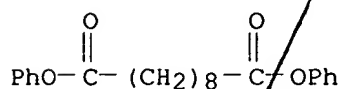
AB The title esters, useful as polymer stabilizers, are synthesized from polyhydric phenols (having 2-3 phenolic OH groups and 1-3 benzenoid rings), a C4-10 aliph. dicarboxylic acid (having 1 thio ether S) and a carbonylating agent such as a phosgene deriv. The molar proportion of carbonylating agent to aliph. carboxylic acid dichloride (7.4 g) was added dropwise to a soln. of 22.9 g 4,4'-butylidenebis(3-methyl-6-tert-butylphenol), 10 mL Et3N, and 90 mL C6H6, followed by a 3-h reflux period, after which the amine-HCl was filtered out and the solvent stripped off. Ph2CO3 6.4, 1,1,3-tris(2-methyl-4-hydroxy-tert-butylphenyl)butane 16.3, and K2CO3 0.05 g were added and the resultant PhOH distd. off 145.degree./3 torr) to give a light yellow, glassy solid (m. 92-98.degree.) of mol. wt.

KATHLEEN FULLER EIC 1700 308-4290

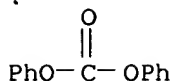
1480.  
 ST polyhydric phenol dicarboxylate carbonate stabilizer; phenol stabilizer  
 low reactivity  
 IT Heat stabilizers  
 (bisphenol polycarbonate-polyesters, for thermoplastics)  
 IT Polyesters, uses and miscellaneous  
 RL: USES (Uses)  
 (polycarbonate-, bisphenol-based, as heat stabilizers for plastics)  
 IT Polycarbonates  
 RL: USES (Uses)  
 (polyester-, bisphenol-based, as heat stabilizers for plastics)  
 IT 9002-86-2 9002-88-4 9003-07-0 9003-28-5 9003-56-9 24937-78-8  
 32131-17-2, uses and miscellaneous  
 RL: USES (Uses)  
 (heat stabilizers for, bisphenol polycarbonate-polyesters as)  
 IT 63392-12-1P 63392-13-2P 63392-14-3P 63392-17-6P 63392-18-7P  
 63392-19-8P 63392-20-1P 63392-22-3P 63392-23-4P 63392-24-5P  
 63392-25-6P 63392-26-7P 63392-28-9P 63392-29-0P 63392-30-3P  
 63392-31-4P 63392-33-6P 63392-51-8P 63392-53-0P 63392-54-1P  
 63392-55-2P 102193-92-0P 102193-94-2P 102193-95-3P 102193-96-4P  
 102193-97-5P 102193-98-6P 102193-99-7P  
 RL: PREP (Preparation)  
 (manuf. of, as heat stabilizers for plastics)  
 IT 102193-97-5P  
 RL: PREP (Preparation)  
 (manuf. of, as heat stabilizers for plastics)  
 RN 102193-97-5 HCAPLUS  
 CN Decanedioic acid, diphenyl ester, polymer with diphenyl carbonate and  
 4,4'-(1-methylethylidene)bis[3-(1,1-dimethylethyl)phenol] (9CI) (CA INDEX  
 NAME)  
 CM 1  
 CRN 3537-71-1  
 CMF C23 H32 O2



CM 2  
 CRN 2918-18-5  
 CMF C22 H26 O4



CM 3  
 CRN 102-09-0  
 CMF C13 H10 O3



L16 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1984:175569 HCAPLUS

DN 100:175569

TI Polyester graft polymers

PA Unitika Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC C08F299-04

ICA C08G063-20

CC 35-8 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

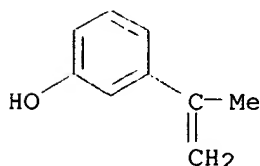
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58225113	A2	19831227	JP 1982-108193	19820622
AB	Vinyl compds. (5-95 parts) are grafted on 95-5 parts polyester (mol. wt. 1000-15,000) from diacyl halides, bisphenols, and unsatd. compds. Thus, terephthaloyl dichloride 1010, isophthaloyl dichloride 1020, and methacryloyl chloride 63 g in 30 L CH <sub>2</sub> Cl <sub>2</sub> was added to bisphenol A 2340, NaOH 840, and H <sub>2</sub> O 45,000 g stirred at 20.degree. to give a polyester (I) (no.-av. mol. wt. 4200). I 100, Me methacrylate 100, Bz <sub>2</sub> O <sub>2</sub> 3, and dicumyl peroxide 3 g were stirred heated over 5 h to 250.degree. to give a copolymer [89884-18-4] forming clear films when cast from CH <sub>2</sub> Cl <sub>2</sub> .				
ST	graft polymer film transparent; bisphenol A polyester grafting; terephthalate polyester grafting; isophthalate polyester grafting; methacrylate polyester grafting; polyester grafting film transparent				
IT	Polyesters, preparation RL: PREP (Preparation) (methacrylate-grafted, for transparent films)				
IT	89698-72-6	89698-73-7	89884-16-2	89884-17-3	
	89884-18-4	89905-88-4			
	RL: USES (Uses) (graft, for transparent films)				
IT	89884-16-2 89884-17-3 RL: USES (Uses) (graft, for transparent films)				
RN	89884-16-2 HCAPLUS				
CN	1,3-Benzenedicarbonyl dichloride, polymer with 1,4-benzenedicarbonyl dichloride, 3-(1-methylethenyl)phenol, 4,4'-(1-methylethylidene)bis[phenol] and methyl 2-propenoate (9CI) (CA INDEX NAME)				

CM 1

CRN 51985-06-9

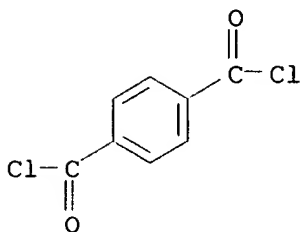
CMF C9 H10 O

2



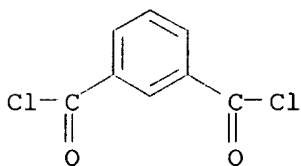
CM 2

CRN 100-20-9  
 CMF C8 H4 Cl2 O2



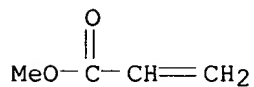
CM 3

CRN 99-63-8  
 CMF C8 H4 Cl2 O2



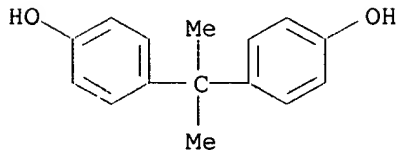
CM 4

CRN 96-33-3  
 CMF C4 H6 O2



CM 5

CRN 80-05-7  
 CMF C15 H16 O2

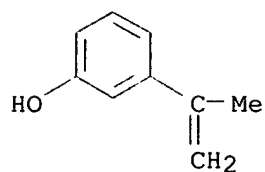


RN 89884-17-3 HCAPLUS  
 CN 1,3-Benzenedicarbonyl dichloride, polymer with 1,4-benzenedicarbonyl dichloride, butyl 2-methyl-2-propenoate, 3-(1-methylethenyl)phenol and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

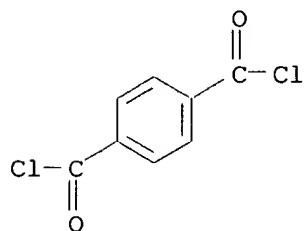


CRN 51985-06-9  
CMF C9 H10 O



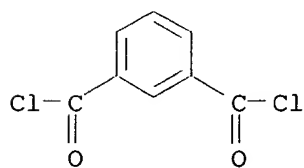
CM 2

CRN 100-20-9  
CMF C8 H4 Cl2 O2



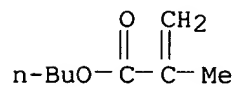
CM 3

CRN 99-63-8  
CMF C8 H4 Cl2 O2



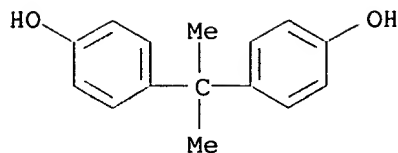
CM 4

CRN 97-88-1  
CMF C8 H14 O2



CM 5

CRN 80-05-7  
CMF C15 H16 O2



L16 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2000 ACS  
 AN 1979:558192 HCAPLUS  
 DN 91:158192  
 TI Preparation, characterization and antiviral activity of phenolic polymers.  
 Part 1. Preparation and characterization of phenol polymers  
 AU Kloecking, Renate; Helbig, B.; Thiel, K. D.; Blumoehr, T.; Wutzler, P.;  
 Sproessig, M.; Schiller, F.  
 CS Inst. Med. Mikrobiol., Med. Akad. Erfurt, Erfurt, DDR-506, Ger. Dem. Rep.  
 SO Pharmazie (1979), 34(5-6), 292-3  
 CODEN: PHARAT; ISSN: 0031-7144  
 DT Journal  
 LA German  
 CC 35-4 (Synthetic High Polymers)  
 AB o-Diphenols are oxidatively polycond. in the presence of tyrosinase  
 [9002-10-2] and the polyanionic products characterized by mol. wt.,  
 reductive cleavage with Na amalgam, and complexation with Alcian Blue and  
 Pb. The spectra of the complexes are compared with those of humic acids.  
 ST diphenol oxidative polymn tyrosine; tyrosine polymn catalyst diphenol;  
 catalytic oxidative polymn diphenol  
 IT Humic acids  
 RL: USES (Uses)  
 (complexes with Alcian Blue and lead, spectra of)  
 IT Ultraviolet and visible spectra  
 (of Alcian Blue complexes with lead and diphenol polymers)  
 IT Phenols, polymers  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (dihydric, polymers, oxidative prepn. of, in presence of tyrosinase)  
 IT Polymerization  
 (enzymic, oxidative, of diphenols)  
 IT Polymerization catalysts  
 (oxidative, tyrosinase, for diphenols)  
 IT 7439-92-1D, complexes with Alcian Blue and phenol polymers 12040-44-7D,  
 complexes with lead and diphenol polymers 71693-97-5D, complexes with  
 Alcian blue and lead 71693-98-6D, complexes with Alcian blue and  
 lead  
 RL: PRP (Properties)  
 (absorption spectra of)  
 IT 9002-10-2  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for oxidative polymn. of diphenols)  
 IT 26982-53-6P 30813-84-4P 31387-49-2P 71693-95-3P 71693-96-4P  
 71693-97-5P 71693-98-6P 71693-99-7P 71694-00-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (oxidative prepn. of, in presence of tyrosinase)  
 IT 71693-98-6D, complexes with Alcian blue and lead  
 RL: PRP (Properties)  
 (absorption spectra of)  
 RN 71693-98-6 HCAPLUS  
 CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-  
 propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA  
 INDEX NAME)

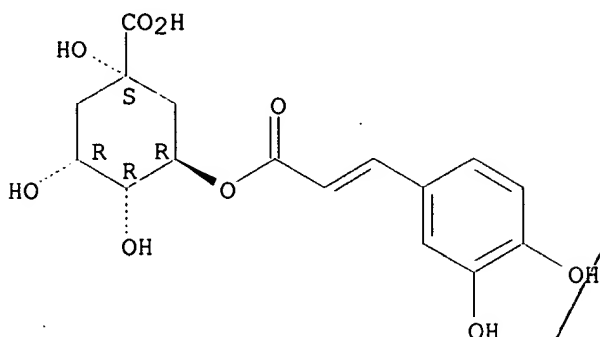
CM 1

CRN 327-97-9

KATHLEEN FULLER EIC 1700 308-4290

CMF C16 H18 O9

Absolute stereochemistry.  
Double bond geometry unknown.



IT 71693-98-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(oxidative prepn. of, in presence of tyrosinase)

RN 71693-98-6 HCAPLUS

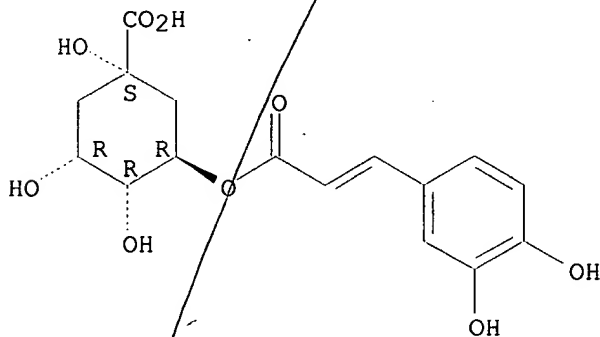
CN Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, (1S,3R,4R,5R)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 327-97-9

CMF C16 H18 O9

Absolute stereochemistry.  
Double bond geometry unknown.



L16 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2000 ACS

AN 1978:563273 HCAPLUS

DN 89:163273

TI Water-soluble humic acids and humic acid-like substances from their  
lead(II) chelates

IN Kloecking, Renate; Helbig, Bjoern

PA E. Ger.

SO Ger. (East), 5 pp.

CODEN: GEXXA8

DT Patent

LA German

IC C07G001-00

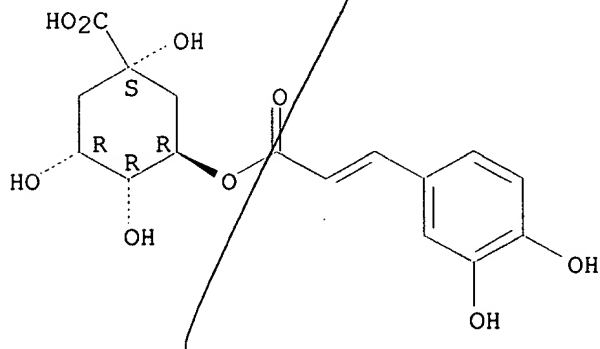
CC 25-17 (Noncondensed Aromatic Compounds)

FAN.CNT 1

KATHLEEN FULLER EIC 1700 308-4290

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DD 129916	Z	19780215	DD 1977-197452	19770218
AB	Water-sol. humic acids and related compds. were recovered from Pb(II) chelates by treatment with 8-quinolinol. Thus, 3 g Pb(II) humate in 100 mL 1N NH4OH was treated with 3 g 8-quinolinol, the pptd. Pb(II) oxinate filtered off, filtrate extd. with CHCl3, concd., and NH4 humate pptd. with HOAc-Et2O.				
ST	lead humate chelation quinolinol; humic acid recovery				
IT	Humic acids				
	RL: PROC (Process)				
	(recovery of, from lead chelates)				
IT	67807-53-8P 67843-94-1P				
	RL: SPN (Synthetic preparation); PREP (Preparation)				
	(prepn. of)				
IT	148-24-3, reactions				
	RL: RCT (Reactant)				
	(reaction of, with lead humate)				
IT	67807-52-7 67810-67-7				
	RL: RCT (Reactant)				
	(reaction of, with quinolinol)				
IT	67843-94-1P				
	RL: SPN (Synthetic preparation); PREP (Preparation)				
	(prepn. of)				
RN	67843-94-1 HCAPLUS				
CN	Cyclohexanecarboxylic acid, 3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxy-, monosodium salt, [1S-(1.alpha.,3.beta.,4.alpha.,5.alpha.)]-, homopolymer (9CI) (CA INDEX NAME)				
CM	1				
CRN	67843-93-0				
CMF	C16 H18 O9 . Na				
CDES	*				

Absolute stereochemistry.  
Double bond geometry unknown.



● Na

IT 67810-67-7  
RL: RCT (Reactant)  
(reaction of, with quinolinol)

RN 67810-67-7 HCAPLUS

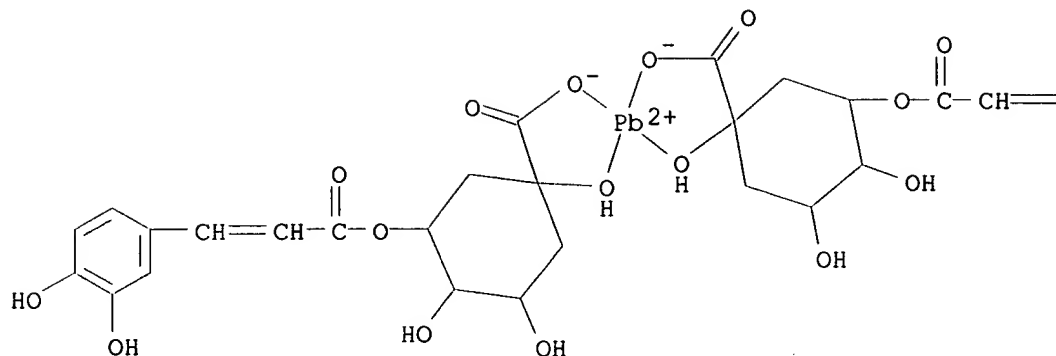
CN Lead, bis[3-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propenyl]oxy]-1,4,5-trihydroxycyclohexanecarboxylato]-, [T-4-[1S-(1.alpha.,3.beta.,4.alpha.,5.alpha.)], [1S-(1.alpha.,3.beta.,4.alpha.,5.alpha.)]]-, homopolymer (9CI)  
(CA INDEX NAME)

KATHLEEN FULLER EIC 1700 308-4290

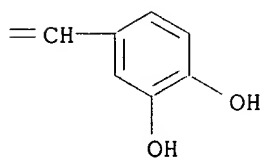
CM 1

CRN 67810-66-6  
 CMF C32 H34 O18 Pb  
 CCI CCS  
 CDES \*

PAGE 1-A



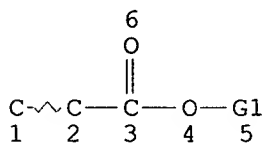
PAGE 1-B



=&gt; d que 123

L4

STR



VAR G1=AK/CY

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DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

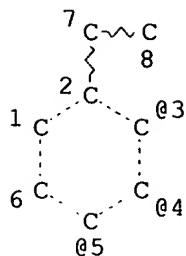
NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L5

STR

Large structure set (1 and 2)  
 and ? resist?  
 and ? hydroxyphenyl?  
 and 2 acryl?  
 and photo ? (6A) ? resist?  
 11 additional  
 CA ref 's



OH @9

VPA 9-3/4/5 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

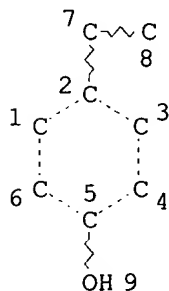
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L7 SCR 2043

L9 5796 SEA FILE=REGISTRY SSS FUL L4 AND L5 AND L7

L10 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

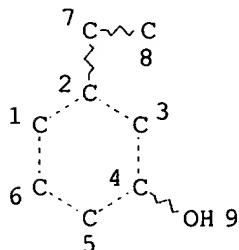
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L11 STR



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

## STEREO ATTRIBUTES: NONE

L13 16 SEA FILE=REGISTRY SUB=L9 SSS FUL (L10 AND L11)  
 L14 17 SEA FILE=HCAPLUS ABB=ON L13  
 L17 3288 SEA FILE=HCAPLUS ABB=ON L9  
 L18 0 SEA FILE=HCAPLUS ABB=ON L17 AND (META(W)HYDROXY? OR M(W)HYDROX  
 Y?) AND (PARA(W)HYDROXY OR P(W)HYDROXY)  
 L19 251 SEA FILE=HCAPLUS ABB=ON L17 AND ?HYDROXYPHENYL?  
 L20 99 SEA FILE=HCAPLUS ABB=ON L19 AND ?RESIST?  
 L21 64 SEA FILE=HCAPLUS ABB=ON L20 AND ?ACRYL?  
 L22 11 SEA FILE=HCAPLUS ABB=ON L21 AND PHOTO?(6A)?RESIST?  
 L23 11 SEA FILE=HCAPLUS ABB=ON (L18 OR L22 OR L14) NOT L14

=&gt; d 123 1-11 bib abs hitind hitstr

L23 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1999:565055 HCAPLUS

DN 131:215703

TI Abrasion-resistant transparent coated moldings and production  
methods therefor

IN Shibuya, Takashi; Higuchi, Toshihiko; Kondo, Satoshi; Yamamoto, Hiroshi

PA Asahi Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11240101	A2	19990907	JP 1998-45814	19980226
AB	Moldings are coated with an inside layer contg. cationically polymerizable polyfunctional compds. and cation-generating photochem. polymn. initiators and an outside layer contg. silica-forming compds. Thus, an arom. polycarbonate plate was coated with xylene contg. KRM 2199, 4% (vs. the resin) SP-150, and 3% 2-(3,5-di-tert-amyl-2-hydroxyphenyl)benzotriazole, dried, and irradiated with UV to form a coating, coated with L 110 (a perhydropolysilazane soln.) contg. a catalyst, and heated to form a silica coating.				
IC	ICM B32B009-00 ICS B32B027-00; C08J007-04; C09D005-00; C09D183-16				
CC	42-10 (Coatings, Inks, and Related Products)				
ST	abrasion resistant transparent coating polycarbonate; photopolymn catalyst transparent coating				
IT	Abrasion-resistant coatings Photopolymerization catalysts Transparent coatings (abrasion-resistant transparent 2-layer coatings on polycarbonates)				
IT	Sulfonium compounds RL: CAT (Catalyst use); USES (Uses) (abrasion-resistant transparent 2-layer coatings on polycarbonates)				
IT	Novolak epoxy resins RL: TEM (Technical or engineered material use); USES (Uses) (abrasion-resistant transparent 2-layer coatings on KATHLEEN FULLER EIC 1700 308-4290				

polycarbonates)  
IT Polycarbonates, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Polyurethanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(acrylic, reaction products with cyclohexanedimethanol divinyl ether; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Vinyl polymers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ether; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Epoxy resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated bisphenol A; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Silazanes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(perhydro, L 110; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Cationic polymerization catalysts  
(photochem.; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Vinyl ethers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polymers; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyurethane-, reaction products with cyclohexanedimethanol divinyl ether; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 68924-34-5, KRM 2199  
RL: TEM (Technical or engineered material use); USES (Uses)  
(KRM 2199; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 30583-72-3, KRM 2408  
RL: TEM (Technical or engineered material use); USES (Uses)  
(KRM 2408; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 125054-47-9, Adeka Optomer SP 150  
RL: CAT (Catalyst use); USES (Uses)  
(SP-150; abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 75980-60-8, 2,4,6-Trimethylbenzoyldiphenylphosphine oxide  
RL: CAT (Catalyst use); USES (Uses)  
(abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 50856-26-3P, Poly(ethylene glycol divinyl ether) 57758-91-5P,  
Poly(trimethylolpropane trivinyl ether) 151543-64-5P,  
Poly(1,4-cyclohexanedimethanol divinyl ether) 242151-12-8P  
242482-18-4P, URI 401  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(abrasion-resistant transparent 2-layer coatings on polycarbonates)  
IT 7631-86-9, Silica, uses 242479-76-1, KRM 2604  
RL: TEM (Technical or engineered material use); USES (Uses)  
(abrasion-resistant transparent 2-layer coatings on polycarbonates)



IT 242151-12-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (abrasion-resistant transparent 2-layer coatings on polycarbonates)

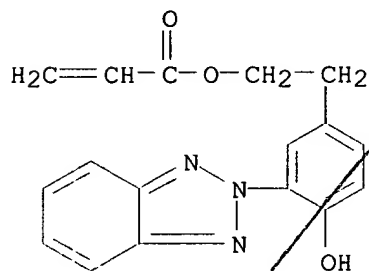
RN 242151-12-8 HCAPLUS

CN 2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,4-bis[(ethenyloxy)methyl]cyclohexane and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

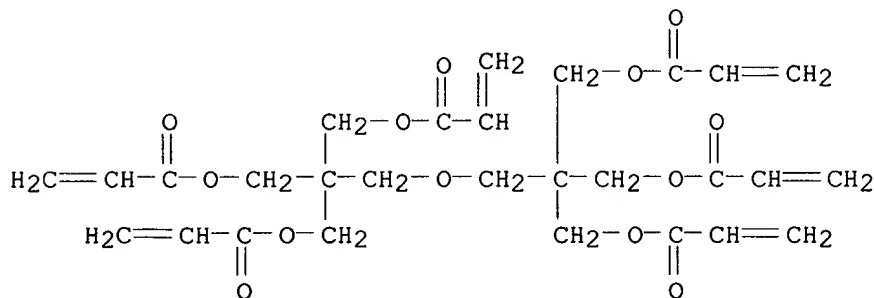
CMF C17 H15 N3 O3



CM 2

CRN 29570-58-9

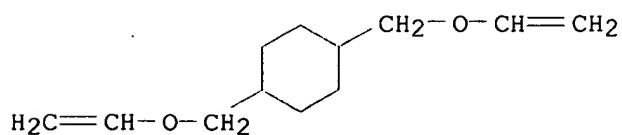
CMF C28 H34 O13



CM 3

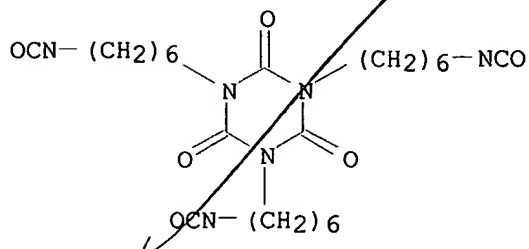
CRN 17351-75-6

CMF C12 H20 O2



CM 4

CRN 3779-63-3  
CMF C24 H36 N6 O6



L23 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1999:557093 HCAPLUS

DN 131:206963

TI Positive-working electrodeposition photoresist composition,  
pattern formation, and pattern

IN Imai, Genji; Kogure, Hideo; Hasegawa, Takeya

PA Kansai Paint Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

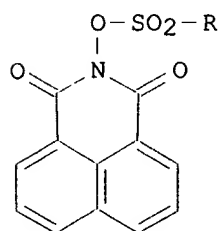
CODEN: JKXXAF

DT Patent

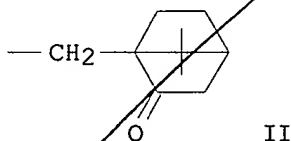
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11237731	A2	19990831	JP 1998-335061	19981001
PRAI	JP 1997-289218		19971007		
OS	MARPAT 131:206963				
GI					



I



II

AB The title photoresist comprises a compn. contg. (a) a polymer having 0.5-10 equiv/kg polymer carboxyl group and optionally .gtoreq.1 equiv/kg polymer hydroxyphenyl group, (b) a compd. having .gtoreq.2 vinyl ether groups in its mol., (c) a compd., generating an acid upon visible light irradsn., naphthalenedicarboxylic sulfonylimides I [R = CR1R2R3 (R1-3 = H or F); C6H4Me-p, dicyclopentanyl group II], and (d) a sensitizing dye and is neutralized with a basic compd. and then dissolved or dispersed in an aq. medium. The photoresist compn. is applied on a substrate with a conductive surface by electrodeposition, heated, irradiated selectively with visible light, heated, and developed with a basic developing soln. to form a pattern. The pattern formed by the above method is suitable for elec. circuit, printing plate, etc. The photoresist compn. provides a high resolu. pattern with good

KATHLEEN FULLER EIC 1700 308-4290

profile and shows improved thermal stability.

IC ICM G03F007-004  
ICS G03F007-004; C08L101-00; H05K003-00

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 42

ST pos working **photoresist** electrodeposition heat resistant  
; carboxy contg polymer pos working **photoresist**; acid generating agent naphthalenedicarboxylic sulfonylimide; vinyl ether pos working **photoresist** electrodeposition

IT Electrodeposition  
Heat-resistant materials  
Positive **photoresists**  
(electrodeposition pos.-working **photoresist** with heat resistance)

IT Phenolic resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrodeposition pos.-working **photoresist** with heat resistance)

IT Printed circuit boards  
(electrodeposition pos.-working **photoresist** with heat resistance for)

IT 83697-53-4, NAI 100  
RL: MOA (Modifier or additive use); USES (Uses)  
(NAI 100, acid-generating agent; electrodeposition pos.-working **photoresist** with heat resistance)

IT 5551-72-4, NAI 101 85342-62-7, NAI 105  
RL: MOA (Modifier or additive use); USES (Uses)  
(acid-generating agent; electrodeposition pos.-working **photoresist** with heat resistance)

IT 110-75-8DP, 2-Chloroethyl vinyl ether, reaction product with cresol-formaldehyde copolymer 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P, **Acrylic acid-butyl acrylate**-2-hydroxyethyl **acrylate**-styrene copolymer 25609-90-9P, **Acrylic acid-butyl methacrylate**-styrene copolymer 30323-62-7P, **Acrylic acid-butyl acrylate**-ethyl **acrylate**-styrene copolymer 51512-40-4P, **Acrylic acid-p-hydroxystyrene** copolymer 52411-04-8P 68189-17-3P, o-Cresol-formaldehyde-o-hydroxybenzoic acid copolymer **96913-05-2P**, Butyl **acrylate**-p-hydroxystyrene copolymer **161613-66-7P**, **Acrylic acid-butyl acrylate**-p-hydroxystyrene copolymer 175356-67-9P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(electrodeposition pos.-working **photoresist** with heat resistance)

IT 77-99-6, Trimethylolpropane 80-05-7, Bisphenol A, reactions 110-75-8, 2-Chloroethyl vinyl ether 764-48-7, 2-Hydroxyethyl vinyl ether 26471-62-5, Tolylene diisocyanate  
RL: RCT (Reactant)  
(electrodeposition pos.-working **photoresist** with heat resistance contg. vinyl ether from)

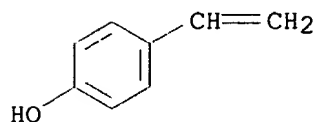
IT 136996-92-4, LS 5 155306-71-1, NKX 1595 209797-82-0 227475-07-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(sensitizer; electrodeposition pos.-working **photoresist** with heat resistance)

IT **96913-05-2P**, Butyl **acrylate**-p-hydroxystyrene copolymer **161613-66-7P**, **Acrylic acid-butyl acrylate**-p-hydroxystyrene copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(electrodeposition pos.-working **photoresist** with heat resistance)

RN 96913-05-2 HCAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)

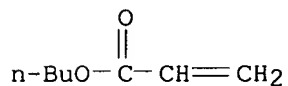
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CRN 2628-17-3  
CMF C8 H8 O



CM 2

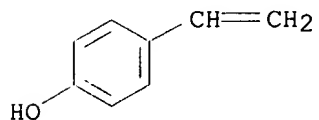
CRN 141-32-2  
CMF C7 H12 O2



RN 161613-66-7 HCAPLUS  
CN 2-Propenoic acid, polymer with butyl 2-propenoate and 4-ethenylphenol (9CI) (CA INDEX NAME)

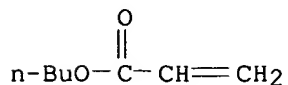
CM 1

CRN 2628-17-3  
CMF C8 H8 O



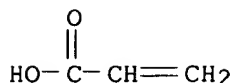
CM 2

CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2



L23 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1997:449025 HCAPLUS

DN 127:82293

TI Radiation-sensitive resin compositions and their cured products for negative **resists**

IN Taniguchi, Nobuo; Yokoshima, Minoru

PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09157350	A2	19970617	JP 1995-346146	19951212
OS	MARPAT 127:82293				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compns. contain (A) copolymers of unsatd. carboxylic acids, epoxy-contg. radically polymerizable compds. and other radically polymerizable compds., (B) phenolic compds., (C) melamines I (R1-R6 = H, CH2OR; R = H, C1-6 alkyl), and (D) onium salts II (R7 = C1-10 alkyl; R8-R12 = H, OH, C1-15 aliph. group, halo, NO2, alkoxy, ester, Ph, X; R13-R22 = H, halo, NO2, alkoxy, C1-20 aliph. group, Ph, OPh, SPh; Z = BF4, PF6, SbF6, AsF6, O3SC6H4Me-p, O3SCF3; n = 1-2) as photoacid generators. Thus, copolymer (prepd. from butadiene 1.0, styrene 10, **methacrylic acid 20, dicyclopentanyl methacrylate 29,** and glycidyl **methacrylate 40 g) 100, 1,1,1-tri(p-hydroxyphenyl)ethane 100, Cymel 300 20, and II (R7 = Bu, R9 = Cl, R15 = R20 = F, other R8-R21 = H, Z = SbF6, n = 1) 3 parts were mixed, spin-coated on a Si wafer, covered with a neg. film, irradiated by UV, and developed with aq. Me4NOH to show good developability, pattern shape, heat **resistance,** and film remaining.**

IC ICM C08G059-20

ICS C08G059-40; C08G059-62; C08G059-68

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 74, 76

ST radiation sensitive resin neg **resist**; phenol radiation sensitive resin **resist**; melamine radiation sensitive resin **resist**; sulfonium **photoacid** generator resin **resist**IT **Photoresists**(neg.-working; radiation-sensitive resin compns. for neg. **resists**)

IT Sulfonium compounds

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(radiation-sensitive resin compns. for neg. **resists**)

IT 191351-77-6P 191801-96-4P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(photoacid generators; radiation-sensitive resin compns. for neg. **resists**)

KATHLEEN FULLER EIC 1700 308-4290

IT 191351-70-9P 191351-73-2P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (radiation-sensitive resin compns. for neg. resists)

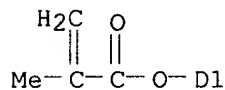
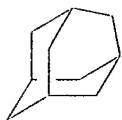
IT 395-25-5, 4,4'-Difluorodiphenyl sulfoxide 128420-54-2  
 RL: RCT (Reactant)  
 (sulfonium photoacid generators prepd. from; radiation-sensitive resin compns. for neg. resists)

IT 191351-70-9P 191351-73-2P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (radiation-sensitive resin compns. for neg. resists)

RN 191351-70-9 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, 4,4',4''-ethylidynetris[phenol], formaldehyde, oxiranylmethyl 2-methyl-2-propenoate, 1,3,5-triazine-2,4,6-triamine and tricyclo[3.3.1.1<sup>3,7</sup>]decyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

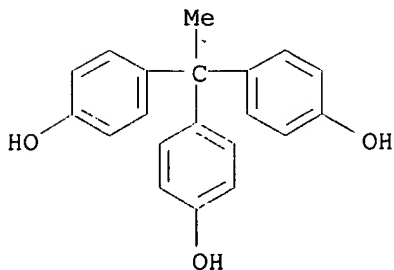
CM 1

CRN 71097-48-8  
 CMF C14 H20 O2  
 CCI IDS  
 CDES 8:ID



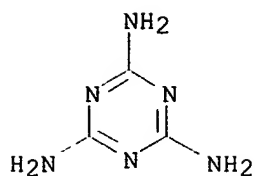
CM 2

CRN 27955-94-8  
 CMF C20 H18 O3



CM 3

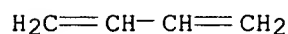
CRN 108-78-1  
 CMF C3 H6 N6



CM 4

CRN 106-99-0

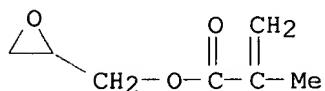
CMF C4 H6



CM 5

CRN 106-91-2

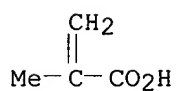
CMF C7 H10 O3



CM 6

CRN 79-41-4

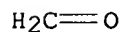
CMF C4 H6 O2



CM 7

CRN 50-00-0

CMF C H2 O



RN 191351-73-2 HCAPLUS

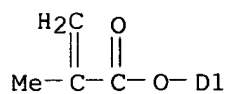
CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, formaldehyde, 4,4'-(1-methylethylidene)bis[phenol], oxiranylmethyl 2-methyl-2-propenoate, 1,3,5-triazine-2,4,6-triamine and tricyclo[3.3.1.1.3,7]decyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 71097-48-8

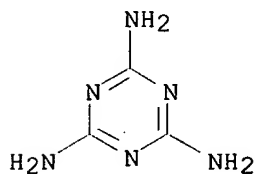
CMF C14 H20 O2

CCI IDS  
CDES 8:ID



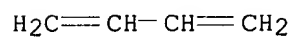
CM 2

CRN 108-78-1  
CMF C3 H6 N6



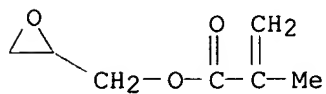
CM 3

CRN 106-99-0  
CMF C4 H6



CM 4

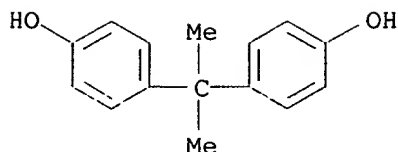
CRN 106-91-2  
CMF C7 H10 O3



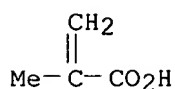
CM 5

CRN 80-05-7  
CMF C15 H16 O2

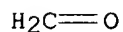




CM 6

CRN 79-41-4  
CMF C4 H6 O2

CM 7

CRN 50-00-0  
CMF C H2 O

L23 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1996:616112 HCAPLUS

DN 125:261166

TI Electrophotographic photoreceptor

IN Horikawa, Yasuaki

PA Idemitsu Kosan Co, Japan

SO Jpn. Kokai Tokkyo Koho, 77 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08179522	A2	19960712	JP 1994-317302	19941220
AB	In the title electrophotog. photoreceptor comprising on its elec. conductive substrate a photosensitive layer contg. a charge-generating substance, a charge-transporting substance, and a binder resin, the photosensitive layer contains a graft polycarbonate obtained from a allyl-contg. polycarbonate or maleic anhydride-modified polycarbonate. This electrophotog. <b>photoreceptor</b> shows good abrasion <b>resistance</b> and improved durability.				
IC	ICM G03G005-05				
CC	74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT	<b>Acrylic</b> polymers, reactions Siloxanes and Silicones, reactions RL: RCT (Reactant) (amino-contg., binder resin for electrophotog. photoreceptor from)				
IT	182055-85-2DP, reaction product with amino-terminated polysiloxanes <b>182055-91-0P 182055-96-5P 182056-02-6P</b> RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses) (binder resin for electrophotog. photoreceptor)				

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IT 70516-26-6P, 2,2-Bis(3-allyl-4-hydroxyphenyl)propane-2,2-bis(4-hydroxyphenyl)propane-phosgene copolymer  
 RL: PNU (Preparation, unclassified); PRP (Properties); RCT (Reactant); PREP (Preparation)  
 (binder resin for electrophotog. photoreceptor from)

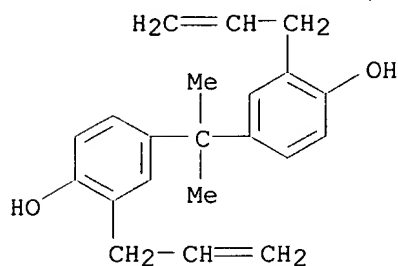
IT 54802-79-8D, 2,2,2-Trifluoroethyl methacrylate homopolymer, amino-terminated and reaction product with maleic anhydride-modified polycarbonate  
 RL: RCT (Reactant)  
 (binder resin for electrophotog. photoreceptor from)

IT 182055-91-0P 182056-02-6P  
 RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)  
 (binder resin for electrophotog. photoreceptor)

RN 182055-91-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with carbonic dichloride, 4,4'-(1-methylethylidene)bis[phenol] and 4,4'-(1-methylethylidene)bis[2-(2-propenyl)phenol], graft (9CI) (CA INDEX NAME)

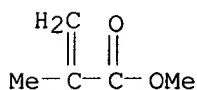
CM 1

CRN 1745-89-7  
 CMF C21 H24 O2



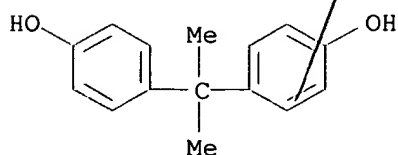
CM 2

CRN 80-62-6  
 CMF C5 H8 O2



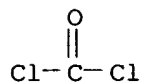
CM 3

CRN 80-05-7  
 CMF C15 H16 O2



CM 4

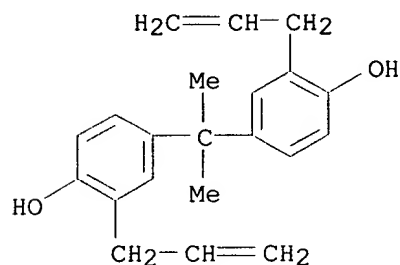
CRN 75-44-5  
CMF C C12 O



RN 182056-02-6 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2,2,2-trifluoroethyl ester, polymer with carbonic dichloride, 4,4'-(1-methylethylidene)bis[phenol] and 4,4'-(1-methylethylidene)bis[2-(2-propenyl)phenol], graft (9CI) (CA INDEX NAME)

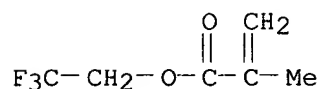
CM 1

CRN 1745-89-7  
CMF C21 H24 O2



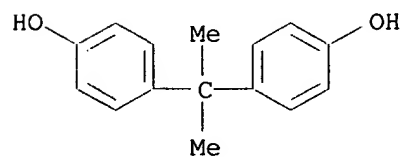
CM 2

CRN 352-87-4  
CMF C6 H7 F3 O2



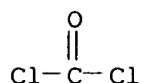
CM 3

CRN 80-05-7  
CMF C15 H16 O2



CM 4

CRN 75-44-5  
CMF C C12 O



L23 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1996:388279 HCAPLUS

DN 125:45274

TI Manufacture of color filter

IN Tamura, Koichi; Iwazawa, Naozumi; Imai, Genji; Norimatsu, Tsutomu

PA Kansai Paint Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

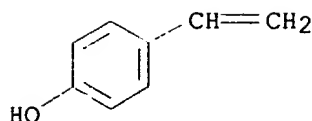
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08094829	A2	19960412	JP 1994-259522	19940928
AB	A color filter is manufd. by (1) forming a transparent elec. conductive layer on a transparent substrate, (2) forming a layer of a photosensitive compn. contg. (a) a polymer having <b>hydroxyphenyl</b> groups, (b) a compd. having .gtoreq.2 vinyl ether groups, and (c) a compd. capable of generating an acid on irradiation with actinic rays, and heating to form a pos.-working photosensitive layer, (3) exposing the photosensitive layer to light, and developing to expose part of transparent elec. conductive layer, (4) forming a colored layer on the exposed elec. conductive layer by electrodeposition, and (5) repeating the steps (3) and (4) as many as necessary.				
IC	ICM G02B005-20				
	ICS G02F001-1335				
CC	74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT	<b>Resists</b> (photo-, for making color filter)				
IT	110-75-8DP, 2-Chloroethyl vinyl ether, reaction product with cresol novolak 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with 2-chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer <b>96913-05-2P</b> , Butyl <b>acrylate</b> -p-hydroxystyrene copolymer RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process) (photosensitive resin layer from)				
IT	<b>96913-05-2P</b> , Butyl <b>acrylate</b> -p-hydroxystyrene copolymer RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process) (photosensitive resin layer from)				
RN	96913-05-2 HCAPLUS				
CN	2-Propenoic acid, butyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)				

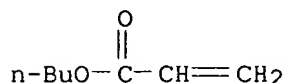
CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 141-32-2  
CMF C7 H12 O2

L23 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1996:382794 HCAPLUS

DN 125:45273

TI Manufacture of color filter

IN Tamura, Koichi; Iwazawa, Naozumi; Imai, Genji; Norimatsu, Tsutomu

PA Kansai Paint Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08094827	A2	19960412	JP 1994-257579	19940926
AB	A color filter is manufd. by (1) forming a transparent elec. conductive layer on a transparent substrate, (2) forming a layer of a photosensitive compn. contg. (a) a polymer or a polymer mixt. having carboxy groups and <b>hydroxyphenyl</b> groups, (b) a compd. having .gtoreq.2 vinyl ether groups, and (c) a compd. capable of generating an acid on irradiation with actinic rays, and heating to form a pos.-working photosensitive layer, (3) exposing the photosensitive layer to light, and developing to expose part of the transparent elec. conductive layer, (4) forming a colored layer on the exposed elec. conductive layer by electrodeposition, and (5) repeating the steps (3) and (4) as many as necessary.				
IC	ICM G02B005-20				
	ICS G02F001-1335				
CC	74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT	<b>Resists</b>				
	(photo-, for making color filter)				
IT	110-75-8DP, 2-Chloroethyl vinyl ether, reaction product with cresol novolak 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with 2-chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P, <b>Acrylic acidbutyl acrylate</b> -2-hydroxyethyl <b>acrylate</b> -styrene copolymer 25609-90-9P, <b>Acrylic acidbutyl methacrylate</b> -styrene copolymer 68189-17-3P, o-Hydroxybenzoic acid-o-cresol-formaldehyde copolymer 96913-05-2P, Butyl <b>acrylate</b> -p-Hydroxystyrene copolymer 161613-66-7P, p-Hydroxystyrene-butyl <b>acrylate</b> -acrylic acid copolymer 166527-07-7P, Bisphenol A-vinyl 2-chloroethyl ether copolymer				
RL:	PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process)				
	(photosensitive resin layer from)				

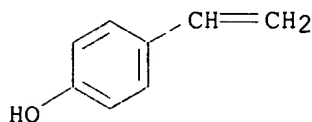
KATHLEEN FULLER EIC 1700 308-4290

IT 96913-05-2P, Butyl acrylate-p-Hydroxystyrene copolymer  
 161613-66-7P, p-Hydroxystyrene-butyl acrylate-acrylic acid copolymer  
 RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process)  
 (photosensitive resin layer from)

RN 96913-05-2 HCAPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)

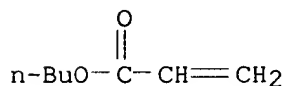
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CRN 2628-17-3  
 CMF C8 H8 O



CM 2

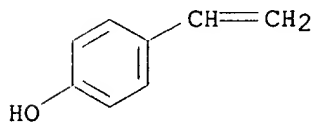
CRN 141-32-2  
 CMF C7 H12 O2



RN 161613-66-7 HCAPLUS  
 CN 2-Propenoic acid, polymer with butyl 2-propenoate and 4-ethenylphenol (9CI) (CA INDEX NAME)

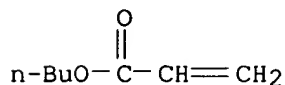
CM 1

CRN 2628-17-3  
 CMF C8 H8 O



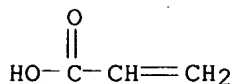
CM 2

CRN 141-32-2  
 CMF C7 H12 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2



L23 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1995:354812 HCAPLUS

DN 122:201272

TI Positive-working **photoresist** compositions for electrodeposition coating and pattern formation

IN Imai, Genji; Iwazawa, Naozumi; Yamaoka, Tsugio

PA Kansai Paint Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06313135	A2	19941108	JP 1993-125500	19930427
	US 5527656	A	19960618	US 1994-233443	19940426
	US 5702872	A	19971230	US 1996-610237	19960304
PRAI	JP 1993-125499		19930427		
	JP 1993-125500		19930427		
	JP 1993-125501		19930427		
	US 1994-233443		19940426		

AB The comps. are manufd. by neutralizing a compn. contg. (A) a polymer having 0.5-10 equiv CO<sub>2</sub>H and .gtoreq.1.0 equiv **hydroxyphenyl** group per 1 kg polymer 100 parts, (B) a compd. having .gtoreq.2 vinyl ether linkage per mol. 5-150 parts, and (C) a photoacid generator sensitive to active energy beam 0.1-40 parts per 100 parts of A + B as the essential components with a basic compd. and dissolving or dispersing the compn. to H<sub>2</sub>O. The pattern is formed by (1) coating of a substrate with an elec. conductive surface layer with the water-base compn. by electrodeposition, (2) heating of the substrate, (3) imagewise irradiation with active energy beam, (4) heating of the substrate, and (5) development with a basic developer. The **photoresist** comps. are storage-stable and provide very fine pattern with high contrast and **resistance** to a developer and a etching soln. in the unexposed area.

IC ICM C09D005-44

ICS C09D005-44; C09D201-08; G03F007-038; G03F007-039; H05K003-00; H05K003-42

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pos working **photoresist** carboxy polymer; **hydroxyphenyl** polymer pos working **photoresist**; vinyl ether pos working **photoresist**

IT Phenolic resins, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(carboxy-contg., water-base pos.-working **photoresists** contg. polymer having carboxy and **hydroxyphenyl** groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT Phenolic resins, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(novolak, vinyloxyethyl ethers; water-base pos.-working

KATHLEEN FULLER EIC 1700 308-4290

photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT Resists  
(photo-, pos.-working, water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT 110-75-8, 2-Chloroethyl vinyl ether  
RL: RCT (Reactant)  
(reaction with bisphenol A; water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT 80-05-7, Bisphenol A, reactions  
RL: RCT (Reactant)  
(reaction with chloroethyl vinyl ether; water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT 25053-96-7DP, o-Cresol-formaldehyde copolymer, 2-vinyloxyethyl ethers  
51512-40-4P, Acrylic acid-p-hydroxystyrene copolymer  
52411-04-8P 68189-17-3P 96913-05-2P 161717-12-0P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT 75482-18-7 161061-13-8 161061-15-0  
RL: TEM (Technical or engineered material use); USES (Uses)  
(water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

IT 96913-05-2P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(water-base pos.-working photoresists contg. polymer having carboxy and hydroxyphenyl groups, vinyl ether compd., and photoacid generator for electrodeposition coating)

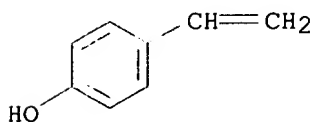
RN 96913-05-2 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O

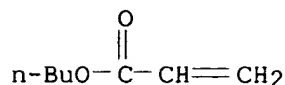


CM 2

CRN 141-32-2

CMF C7 H12 O2





L23 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1995:331444 HCAPLUS

DN 122:201268

TI Positive-working electrodepositable **photoresist** composition and its manufacture

IN Imai, Genji; Iwazawa, Naozumi; Yamaoka, Tsugio

PA Kansai Paint Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06313136	A2	19941108	JP 1993-125501	19930427
	US 5527656	A	19960618	US 1994-233443	19940426
	US 5702872	A	19971230	US 1996-610237	19960304
PRAI	JP 1993-125499		19930427		
	JP 1993-125500		19930427		
	JP 1993-125501		19930427		
	US 1994-233443		19940426		

AB The compn. which is neutralized with an alk. compd. and dispersed or dissolved in water contains a COOH-containing polymer (A), a **hydroxyphenyl**-having polymer (B), 5-150 parts .gtoreq.2 vinyl ether-containing compd. (C; vs. 100 parts of A + B), and 0.1-40 parts acid-generating compd. by active energy beam irradiation. (D; vs. 100 parts of A + B + C) satisfying A/B = 90/10 - 10/90 (wt. ratio), total COOH content 0.5-5.0 equiv/kg, and **hydroxyphenyl** content 0.5-7.0 equiv/kg. The **resist** pattern is manufd. by (1) coating the **photoresist** on a substrate with an elec. conductive surface by electrodeposition, (2) heating the substrate, (3) selectively irradiating an active energy beam, (4) heating the substrate, and (5) developing with an alk. developer. The compn. gave high contrast **resist** images with good chem. **resistance** against developers and etchants, etc.

IC ICM C09D005-44

ICS C09D005-44; C09D201-08; G03F007-038; G03F007-039; H05K003-00

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 72, 76

ST **photoresist** pos carboxyl **hydroxyphenyl** vinyl;electrodeposition **resist** photo pos

IT Electrodeposition and Electroplating

(pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT Phenolic resins, preparation

RL: PNU (Preparation, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cresol-based, pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT **Resists**(photo-, pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT 75482-18-7 161061-13-8 161061-15-0

RL: TEM (Technical or engineered material use); USES (Uses) (acid generator; pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT 764-48-7DP, 2-Hydroxyethylvinyl ether, reaction products with

KATHLEEN FULLER EIC 1700 308-4290

Dup.

polyisocyanate 9017-09-8DP, Trimethylolpropane-tolylene diisocyanate copolymer, reaction products with hydroxyethylvinyl ether 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction products with chloroethylvinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P,

**Acrylic acid-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer 25609-90-9P, Acrylic acid-butyl methacrylate-styrene copolymer 30323-62-7P, Acrylic acid-butyl acrylate-ethyl acrylate-styrene copolymer 96913-05-2P**

RL: PNU (Preparation, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT 80-05-7DP, Bisphenol A, reaction products with chloroethylvinyl ether 110-75-8DP, 2-Chloroethylvinyl ether, reaction products with bisphenol A or cresol resin

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT 121-44-8, Triethylamine, uses

RL: TEM (Technical or engineered material use); USES (Uses) (pos.-working electrodepositable **photoresist** compn. and its manuf.)

IT **96913-05-2P**

RL: PNU (Preparation, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos.-working electrodepositable **photoresist** compn. and its manuf.)

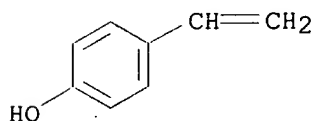
RN 96913-05-2 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 4-ethenylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

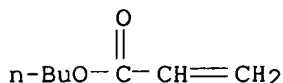
CMF C8 H8 O



CM 2

CRN 141-32-2

CMF C7 H12 O2



L23 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1989:644278 HCAPLUS

DN 111:244278

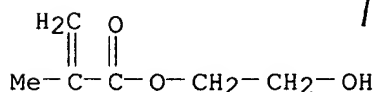
TI Electrophotographic organic photoreceptors with photosensitive layer containing visible light-hardenable resin as binder

IN Tanaka, Masafumi

KATHLEEN FULLER EIC 1700 308-4290

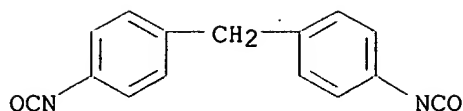
PA Mita Industrial Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01116553	A2	19890509	JP 1987-273878	19871029
AB	Electrophotog. org. photoreceptors are prepd. by forming, on a conductive substrate, a single laminated photosensitive layer comprising a charge-generating substance, a charge-transporting substance, and a binder resin from a visible light-hardenable resin. The photoreceptors exhibit good abrasion resistance, solvent resistance, and sensitivity. Thus, an Al substrate was coated with a compn. contg. a urethane prepolymer obtained from 2,2'-bis(p-hydroxyphenyl)propane, propylene oxide, and diphenylmethane 4,4'-diisocyanate, dihydroxyethyl methacrylate, benzil, .alpha.-naphthil, dimethylaminoethyl methacrylate, N-ethylcarbazole-3-carbaldehyde diphenylhydrazone, and dibromoanthanthrone and then irradiated with visible light (420 nm) to give a photoreceptor showing high sensitivity.				
IC	ICM G03G005-05				
CC	74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT	Urethane polymers, uses and miscellaneous RL: USES (Uses) (acrylic, visable light-curable, binders, for electrophotog. photoreceptors)				
IT	Acrylic polymers, uses and miscellaneous RL: USES (Uses) (polyurethane-, visable light-curable, binders, for electrophotog. photoreceptors)				
IT	123991-14-0 RL: USES (Uses) (binders, for electrophotog. photoreceptors)				
IT	123991-14-0 RL: USES (Uses) (binders, for electrophotog. photoreceptors)				
RN	123991-14-0 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1,1'-methylenebis[4-isocyanatobenzene], 4,4'-(1-methylethylidene)bis[phenol] and methyloxirane (9CI) (CA INDEX NAME)				
CM	1				
CRN	868-77-9				
CMF	C6 H10 O3				



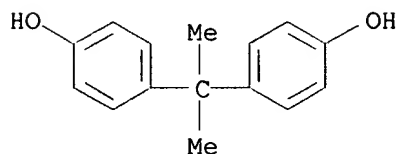
CM 2

CRN 101-68-8  
 CMF C15 H10 N2 O2



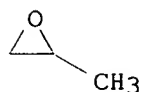
CM 3

CRN 80-05-7  
CMF C15 H16 O2



CM 4

CRN 75-56-9  
CMF C3 H6 O



L23 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1985:15118 HCAPLUS

DN 102:15118

TI Images from liquid substances

IN Irving, Edward; Smith, Terence James

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 37 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 102921	A2	19840314	EP 1983-810340	19830728
	EP 102921	A3	19860108		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	US 4500629	A	19850219	US 1983-517095	19830725
	CA 1203106	A1	19860415	CA 1983-433701	19830802
	ES 524707	A1	19840601	ES 1983-524707	19830803
	JP 59048760	A2	19840321	JP 1983-143095	19830804
PRAI	GB 1982-22467		19820804		

AB Liq. comps. for use in the prodn. of printing plates and printed circuits are composed of an anaerobic polymerizable material and a photopolymerizable material. The comps. are coated on a support under anaerobic conditions and are then exposed to actinic radiation. Thus, a Cu plate was coated with a compn. contg. N-(2-acryloyloxyethyl)dimethylmaleimide 10, 1,1,1-trimethylolpropane trimethacrylate 2, cumene hydroperoxide 0.3, N,N-dimethyl-p-toluidine 0.01, benzoic acid sulfimide 0.02, and 2-chlorothioxanthone 0.2 part to give an 18 .mu.m thick layer. The layer was held at room temp. for 30 min in an air-tight

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container that had been purged with N2 to give a nontacky film. The film was then exposed through a neg. with a 5000 W halogen lamp at 750 mm. Development with cyclohexanone gave a good image on the plate.

IC G03F007-16; G03F007-20

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST liq **photopolymer** compn printing **photoresist**

IT Naphthenic acids, compounds

RL: USES (Uses)

(iron salts, liq. **photopolymerizable** compns. contg., for **photoresists** and printing plates)

IT Phenolic resins, uses and miscellaneous

(epoxy-, liq. **photopolymerizable** compns. contg., for **photoresists** and printing plates)

IT Epoxy resins, uses and miscellaneous

RL: USES (Uses)

(phenolic, liq. **photopolymerizable** compns. contg., for **photoresists** and printing plates)

IT **Resists**

(photo-, liq., contg. anaerobic polymerizable material and photopolymerizable material)

IT 79-41-4, uses and miscellaneous 80-05-7D, reaction products with formaldehyde-phenol copolymer epoxy derivs. 80-15-9 86-39-5 90-94-8 99-97-8 106-71-8 621-82-9D, esters with formaldehyde-phenol copolymer epoxy derivs. 825-85-4 868-77-9 1565-94-2 1576-35-8 2082-81-7 2426-54-2 2455-24-5 3290-92-4 6427-66-3D, esters with formaldehyde-phenol copolymer epoxy derivs. 7328-97-4 7439-89-6D, naphthenates 9003-35-4D, epoxy derivs. 15753-91-0 16678-85-6 24650-42-8 24968-99-8 42978-66-5 51727-48-1 60565-88-0 63729-42-0 63945-12-0 78529-19-8 **93581-39-6** 93581-40-9 **93581-41-0** **93581-42-1** 93581-43-2 93672-55-0 93793-32-9

RL: USES (Uses)

(**photopolymerizable** compns. contg., liq., for **photoresists** and printing plates)

IT 15999-77-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and reaction of, with glycidyl **methacrylate**)

IT 106-91-2

RL: RCT (Reactant)

(reaction of, with (**hydroxyphenyl**)phenylpentadienone)

IT 103-71-9, reactions

RL: RCT (Reactant)

(reaction of, with hydroxyethyl **acrylate**)

IT **93581-39-6** **93581-41-0** **93581-42-1**

RL: USES (Uses)

(**photopolymerizable** compns. contg., liq., for **photoresists** and printing plates)

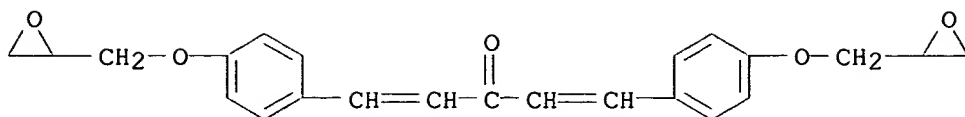
RN 93581-39-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1,5-bis[4-(oxiranylmethoxy)phenyl]-1,4-pentadien-3-one, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 60618-05-5

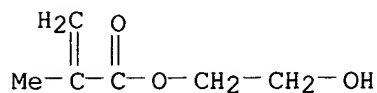
CMF C23 H22 O5



CM 2

CRN 868-77-9

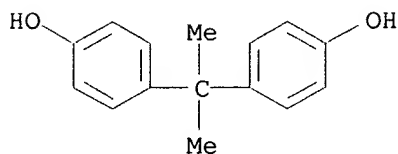
CMF C6 H10 O3



CM 3

CRN 80-05-7

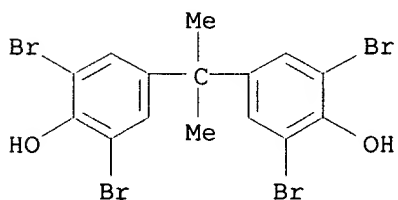
CMF C15 H16 O2



CM 4

CRN 79-94-7

CMF C15 H12 Br4 O2



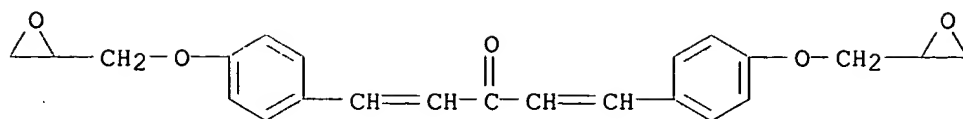
RN 93581-41-0 HCAPLUS

CN 2-Propenoic acid, 2-methoxyethyl ester, polymer with 1,5-bis[4-(oxiranylmethoxy)phenyl]-1,4-pentadien-3-one, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 60618-05-5

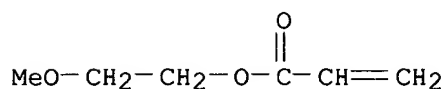
CMF C23 H22 O5



CM 2

CRN 3121-61-7

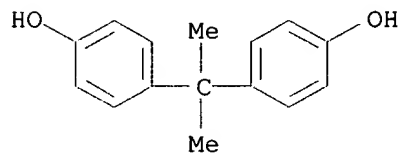
CMF C6 H10 O3



CM 3

CRN 80-05-7

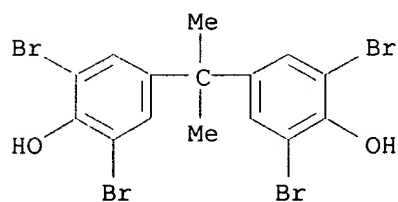
CMF C15 H16 O2



CM 4

CRN 79-94-7

CMF C15 H12 Br4 O2

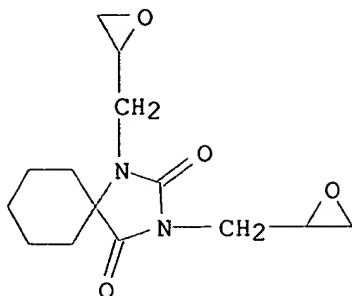


RN 93581-42-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with  
 1,5-bis(4-hydroxyphenyl)-1,4-pentadien-3-one and 1,3-bis(oxiranylmethyl)-  
 1,3-diazaspiro[4.5]decane-2,4-dione (9CI) (CA INDEX NAME)

CM 1

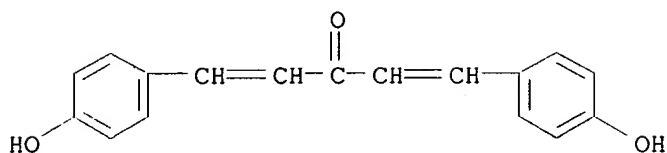
CRN 15336-84-2

CMF C14 H20 N2 O4



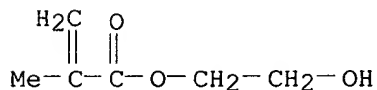
CM 2

CRN 3654-49-7  
CMF C17 H14 O3



CM 3

CRN 868-77-9  
CMF C6 H10 O3



L23 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2000 ACS

AN 1979:620361 HCAPLUS

DN 91:220361

TI Photosensitive resin compositions

IN Iwaki, Akio; Kita, Noriyasu; Kurita, Yoshio; Yamazaki, Atsuo; Seino, Minoru

PA Konishiroku Photo Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54098614	A2	19790803	JP 1978-589	19780109
	JP 57043890	B4	19820917		

AB Photosensitive resin comps. contain a diazo resin and a polymer contg. 1-80 mol % OH group-contg. arom. monomer units. The addn. of the phenolic resin improves the storage stability of the resin comps. as well as the mech. strength of the relief images prepd. from the resin comps. The resin comps. are useful for printing plates or **photoresists**. Thus, a diazo resin (hexafluorophosphate salt) 0.5, N-(p-hydroxyphenyl)methacrylamide-2-hydroxyethyl

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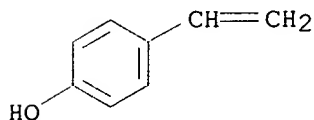


methacrylate-Me methacrylate-methacrylic acid  
 copolymer 5.0, Jurimer AC20L 0.05, Victoria Pure Blue BOH 0.1g, and Me  
 Cellosolve 100 mL were mixed and coated on an Al support to give a  
 presensitized plate having excellent storage stability and durability.  
 IC G03C001-71; G03F007-02; H05K003-06  
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic Processes)  
 ST photosensitive diazo resin printing plate; **photoresist** diazo  
 resin  
 IT **Acrylic** polymers, uses and miscellaneous  
 RL: USES (Uses)  
 (photosensitive diazo resin contg., for lithog.)  
 IT **Resists**  
 (photo-, photosensitive diazo resin compns. for)  
 IT 1325-85-5 9004-57-3 25035-02-3 54066-28-3 72063-22-0 72063-23-1  
 72063-24-2 72063-25-3 72103-87-8 72146-49-7  
 RL: USES (Uses)  
 (photosensitive diazo resin compn. contg., for lithog. plates and  
**photoresists**)  
 IT 72063-25-3  
 RL: USES (Uses)  
 (photosensitive diazo resin compn. contg., for lithog. plates and  
**photoresists**)  
 RN 72063-25-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with 4-ethenylphenol, methyl  
 2-methyl-2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 2628-17-3

CMF C8 H8 O



CM 2

CRN 107-13-1

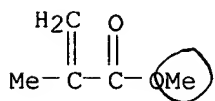
CMF C3 H3 N



CM 3

CRN 80-62-6

CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2

